

Report of the National Statistical Commission



Volume I

August 2001

Dr. C. RANGARAJAN



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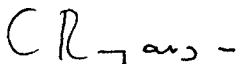
&
Chairman
National Statistical Commission

I have the pleasure of submitting herewith the Report of the National Statistical Commission set up in January 2000. The Report covers several subject areas and has fourteen Chapters. Chapter one is introductory in nature. Chapter two gives the Approach and Overview highlighting some of the deficiencies of the statistical system and a few important remedial measures. Chapter three reproduces all the recommendations made by the Commission for different subject areas. Each of the Chapters 4 to 14 is devoted to a particular subject area, discussing in detail its current status, strengths and deficiencies and the suggested recommendations for the improvement of the system. The Government, as in the case of Interim Report of the Commission submitted earlier in February 2001, may consider making available the Report in the website.

The adequacy, credibility and timeliness of the data generated by the statistical system are essential for the purpose of policy formulation and for monitoring the progress of various sectors of the economy. The Commission has felt that the credibility of official statistics will be enhanced, if an independent statistical authority free from political interference and having the power to set priorities with respect to core statistics is created. We have, therefore, recommended the setting up of an apex policy making body which may be called the National Commission on Statistics. It can serve as the highest decision making authority for ensuring the quality of statistics. The Report of the Commission contains exhaustive recommendations relating to the various subject areas as well as for improving the administrative statistical system both at the Centre and at the States.

On behalf of the Members of the Commission and on my own behalf, I thank you for giving us the opportunity to review the Indian Statistical System and make recommendations for revamping the System.

Yours sincerely,


(C. Rangarajan)

Shri Atal Bihari Vajpayee,
Prime Minister of India,
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1.1 BACKGROUND

1.1.1 The Indian Statistical System is rooted in historical tradition. In the pre-independence era, the system was limited to the needs of colonial rulers and did not develop into an integrated or well-coordinated system. When however, India achieved her independence in 1947, the necessity for creating a strong statistical base for economic planning was keenly felt by the planners and policy makers. The National Income Committee (1949) appointed by the Government of India noticed several large gaps in the statistical database of the country and recommended measures to bring improvements in the system of data collection. The need for creating a sound statistical system, led to the establishment of the Central Statistical Unit (1949) – later converted into the Central Statistical Organisation (1951) – and the Directorate of the National Sample Survey (1950), the Computer Centre (1967) and the National Sample Survey Organisation (1970).

1.1.2 The Indian Statistical System endeavours to capture a wide variety of data of a very large and decentralised economy. Despite the System's impressive and commendable achievements in the past, there is a growing concern regarding the quality of the data presently being made available by it. The operational efficiency of the Indian Statistical System today is compromised by serious deficiencies with respect to credibility, timeliness and adequacy. Some of the deficiencies that could have been ignored in the earlier period of a highly controlled regime can no longer be done, now that the country has moved to a more liberalised economy. The State-private sector mix is undergoing a change. The country is getting integrated more closely with the rest of the world. The composition of national output is changing more in favour of services. These changes have important implications for the collection and dissemination of data. Also data requirements for decision-making have expanded. Revisions of data on such crucial variables such as national income and agricultural production have raised questions among the data users about the adequacy of the data collection system. On one side there is a growing statistical requirement in view of the expanding economy and on the other side there is over dependence of the statistical system on the administrative set up and traditional records. Further, in view of the decentralised nature of the statistical system prevailing in the country, the Government has been feeling that a strong coordinating mechanism to generate adequate data of high quality with the desired timeliness is the need of the hour and a critical examination of the deficiencies of the present statistical system with a view to suggesting remedial action is urgently called for. Realising the growing statistical needs of the Society and to make sure that these get appropriately addressed, the Government of India set up the National Statistical Commission, the first of its kind, through Resolution No. M/13011/3/99-Admn. IV dated 19th January 2000 of the Ministry of Statistics and Programme Implementation (see Annexe 1.1). Dr. C. Rangarajan, Honourable Governor of Andhra Pradesh was appointed as the part-time Chairman of the Commission along with eleven eminent statisticians and economists as its part-time members.

1.2 COMPOSITION AND TERMS OF REFERENCE

1.2.1 The composition of the National Statistical Commission is as follows:

- | | | |
|---|--|-----------------|
| 1 | Dr. C.Rangarajan, Governor, Andhra Pradesh, Hyderabad | Chairman |
| 2 | Shri V.R. Rao, Ex-Director, Central Statistical Organisation and UN Adviser, Hyderabad | Member |

3	Shri S.M. Vidwans, Ex-Director, Directorate of Economics and Statistics, Government of Maharashtra and UN Expert, Mumbai	Member
4	Professor J. Roy, Professor Emeritus, Indian Statistical Institute, Kolkata	Member
5	Dr. Prem Narain, Emeritus Scientist, Indian Agricultural Research Institute and Ex-Director, Indian Agricultural Statistics Research Institute, New Delhi	Member
6	Dr. Rakesh Mohan*, Director General, National Council of Applied Economic Research, New Delhi	Member
7	Dr. V.R. Panchamukhi, Director General, Research and Information System for the Non-Aligned and Other Developing Countries, New Delhi	Member
8	Dr. Y. Venugopal Reddy, Deputy Governor, Reserve Bank of India, Mumbai	Member
9	Dr. K. Srinivasan, Executive Director, Population Foundation of India and Ex-Director of International Institute of Population Studies, New Delhi	Member
10	Professor S. Tendulkar, Delhi School of Economics and Vice-Chairman, National Advisory Board on Statistics, New Delhi	Member
11	Dr. A.B.L. Srivastava, Chief Consultant, Educational Consultants India Ltd. and Ex-Professor, National Council of Educational Research and Training, New Delhi	Member
12	Dr. Freddie Ardesheer Mehta, Eminent Economist and Director, M/s Tata Sons Ltd., Mumbai	Member

1.2.2 The Terms of Reference for the National Statistical Commission are as follows:

- (i) To examine critically the deficiencies of the present statistical system in terms of timeliness, reliability and adequacy;
- (ii) To recommend measures to correct the deficiencies and revamp the statistical system to generate timely and reliable statistics for the purpose of policy and planning in Government at different levels of administrative structure;
- (iii) To recommend permanent and effective coordinating mechanism for ensuring integrated development of the decentralised statistical system in the country;
- (iv) To review the existing legislation for the collection of statistical information and to recommend amendments, where necessary, to achieve the objective of collection and dissemination of timely, reliable and adequate statistics;
- (v) To review the existing organisation of the Ministry of Statistics and Programme Implementation (Statistics Wing) and other statistical units of the Government and to make recommendations on their staffing and training requirements to enable them to cope with the increase and development of statistical services;
- (vi) To examine the need for instituting statistical audit of the range of services provided by the Government and local bodies and make suitable recommendations thereof; and
- (vii) To recommend any other measures for improving the statistical system in the country.

* At present Adviser to the Finance Minister, Ministry of Finance, Government of India

1.3 SECRETARIAT OF THE COMMISSION

1.3.1 In view of the part-time nature of the Chairman and Members of the Commission, the Government set up a Secretariat headed by a full-time Secretary at the level of Additional Secretary and other technical and administrative staff to provide secretarial and administrative support to the Commission. The list of officers and staff of the Secretariat is given in Annexe 1.2. The Secretariat assisted the Commission by way of preparing agenda papers for the meetings, participating in the various committees constituted by the Commission, in the arranging of meetings, making available to the members important papers and documents on various subject areas, and finally by providing secretarial assistance to the Commission in its task of finalising the report.

1.4 PROGRAMME OF WORK

1.4.1 The first meeting of the Commission was held on 9 February 2000 at Hyderabad. At this meeting, the Commission discussed the salient features of the Indian Statistical System with special reference to the credibility, timeliness and adequacy of the statistics generated by the system. It further deliberated on the modalities of its functioning so as to accomplish the objectives. To facilitate focused discussion on varied spheres of the statistical system, seven Sub-groups were formed in the following areas:

- Agricultural Statistics
- National Accounts Statistics
- Industry, Commerce, Corporate Sector and Price Statistics
- Services and Infrastructure Statistics
- Socio-economic Statistics
- Financial and External Sector Statistics
- Statistical Systems, Information and Communication Technology Needs, Human Resource Development, Legislation and Audit

1.4.2 The Sub-groups held detailed discussions on the assigned areas by organising several meetings. Apart from the members, external experts and officials were co-opted in each of the Sub-groups. The list containing the names of members, co-opted members, experts and special invitees associated with various Sub-groups is at Annexe 1.3.

1.4.3 In order to assess the current status of the statistical system, the Commission had requested all the State Governments, Union Territory administrations and Central Ministries and Departments to provide the basic information on the data supplied by them and the perceived data gaps along with their suggestions. The information so collected was analysed and considered by the concerned Sub-groups as well as by the Commission.

1.4.4 To assist the Commission in examining the technical aspects of a number of issues in different sectors of the economy, some expert groups and committees were formed. Each was given specific terms of reference for studying some particular issues. The compositions of these groups and committees are given in Annexe 1.4. The following technical studies have been undertaken by these groups and committees:

- Reviewing the Improvement of Crop Statistics (ICS) Programme for modifying its survey design to provide alternative all-India estimates of crop area and yield rates of major crops and correction factors to adjust the Timely Reporting Scheme estimates of crop area.
- Efficacy of using small-area estimation techniques in the field of Agricultural Statistics.

- Rationalising the village land records for expanding the scope of the existing nine-fold classification of land use.
- Problems in capturing the growth of the Industrial Sector through the Index of Industrial Production (IIP) and the Annual Survey of Industries (ASI).
- Study of Different Sources of Data on Higher and Technical Education.
- Small-area estimation of socio-economic variables at the district and sub-district levels.
- Examining the issues related to data requirements for Direct and Indirect Taxation, Accounting, Budgeting, etc.
- Examining issues related to Insurance Sector Statistics and recommending measures for improving the system.
- Identifying the Information Needs arising out of e-commerce activities and institutional arrangements for data maintenance.
- Examining the status of data on services in the light of emerging issues for international trade in services.
- Critical examination of the status of informal Financial Sector Statistics and suggesting a system for improving data collection.
- Identifying the reasons for a divergence between the estimates of household consumer expenditure and private final consumption expenditure.

1.4.5 Besides, the following presentations were also arranged:

- Use of Remote Sensing Techniques for improving crop yield and acreage statistics in Agriculture by the Space Application Centre, Ahmedabad.
- Data Warehousing Initiatives taken by Reserve Bank of India.

1.4.6 In addition to the above, the Indian Statistical Service Association and the Staff Associations of the Ministry of Statistics and Programme Implementation presented their views on improving the morale of the statistical personnel before the Commission.

1.4.7 The Commission felt that a meeting with the representatives of the States, Union Territories and Central Ministries and Departments be convened to facilitate the members of the Commission to interact directly for assessing their views on various issues identified by them. The same was accomplished by taking the opportunity of the Eleventh Conference of Central and State Statistical Organisations arranged by the Ministry of Statistics and Programme Implementation during the last week of October 2000. The Conference was attended by several heads of statistical organisations or divisions from the States which included Secretaries, Commissioners of Statistics, Directors of Economics and Statistics of the States and senior officers from the Central Ministries and Departments. The views and suggestions that emerged in the Conference have been duly considered during the discussions of the different meetings of the Sub-groups as well as the Commission.

1.4.8 In the course of discussions over several meetings, the Commission observed that Administrative Statistics flowing from various channels of the Government administration suffer seriously from the problem of reliability, timeliness, coverage, etc. The Commission, therefore, felt that there was a need to get the views of the administrators of the States. Accordingly, a meeting with the Chief Secretaries representing twenty-one States was convened in June 2001. Chief Secretaries, Principal Secretaries, Secretaries and other senior officers in the State Administration attended the meeting. The meeting provided an opportunity to the Commission to discuss the State Statistical System including the Administrative System, participation of the States in the Statistical Legislation, improving the Centre-State Coordination in statistical activities and the use of Information Technology in improving the statistical system. While expressing their views on the above issues, the representatives from the States were also of the

view that overall improvement in the State Statistical System is essential for strengthening the Indian Statistical System, as the former is an integral part of the latter.

1.4.9 The Commission held a total of 15 meetings, the last being held on 2-3 August 2001 and discussed the issues brought before it by the Sub-groups, which had met 39 times. The Commission submitted an Interim Report focusing on issues relating to the Agricultural, Industrial, Corporate, Financial and External Sectors during the month of February 2001. A number of experts in the fields including retired senior officers of the Government forwarded their comments on the various recommendations of the Commission enlisted in the Interim Report. The Commission has considered these views during the discussion in its subsequent meetings.

1.4.10 The Commission was required to submit its Report to the Government within a period of 12 months. However, in view of the wide-ranging terms of reference and emergence of many contentious issues, the Commission requested an extension of six months. Accordingly, the Government, through Resolution No. M-13011/3/99/Adm.IV dated 23 January 2001 of the Ministry of Statistics and Programme Implementation (see Annexe 1.5) extended the term of the Commission up to 18 July 2001, the tenure being thereafter further extended up to 18 August 2001 in order to enable the completion of the Report.

1.5 ORGANISATION OF THE REPORT

1.5.1 The Report has been divided into two volumes. Volume I comprises three chapters, while Volume II has eleven chapters. All the chapters have been continuously numbered for easy identification. Annexes pertaining to the different chapters have been accommodated in the concerned volume for quick reference.

1.5.2 Chapter 1 in Volume I, is introductory in nature, giving in brief, the circumstances leading to the formation of the Commission, its composition, the terms of reference of the Commission and the programme followed in its task. In Chapter 2, the approach followed by the Commission while dealing with the different issues has been discussed, besides, giving an overview of the entire Report highlighting important recommendations made by the Commission. All the recommendations made by the Commission have been furnished as the third chapter. Chapters 4 to 14 in Volume II deal with the different sectors of the economy, discussing in a detailed manner the current status, deficiencies and remedial measures for each of these.

1.6 ACKNOWLEDGEMENTS

1.6.1 The Commission takes this opportunity to express its thanks to the ministries, departments, organisations of the Central and State Governments, quasi-Governmental and non-Governmental organisations as well as individual experts who have contributed immensely and helped the Commission in formulating their views. It further thanks all the co-opted members for their suggestions during the discussions in the Sub-group meetings. The Commission wishes to place on record its thanks to all the special invitees who attended the meetings of the Sub-groups as well as the Commission for their contributions during the discussion. The Commission acknowledges the contributions by the participants of the Eleventh Conference of the Central and State Statistical Organisations based on which recommendations on several technical issues could be formulated. It would also like to place it on record its thanks to all those Chief Secretaries, Principal Secretaries, Secretaries and other senior officers who participated in the meeting of the Chief Secretaries and suggested measures for improving Administrative Statistical System.

1.6.2 The Commission is indebted to all those experts, senior officers from Central and State Governments and retired officers who contributed their valuable views and comments on the Interim Report. The Commission received important inputs from a number of Committees and Expert Groups appointed by it, for which it records its thanks to the members of such Groups and

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2.1 INTRODUCTION

2.1.1 Collection of numerical data for the purpose of understanding the behaviour of various socio-economic variables has a long history. The origin of the term 'statistics' is associated with this concept, which is to describe the state. Of course, statistics, as a scientific discipline, goes beyond enumeration. Statistical inference is an important part of the discipline. However, inference will be fruitless, if the basic data are faulty or inaccurate or unreliable. That is why we have to pay attention to data collection in all its dimensions. A good statistical system is a prerequisite for sound decision-making and for the formulation and monitoring of public policies.

2.1.2 India, in accordance with its federal structure, has created a statistical system, which is both decentralised and centralised. Large-scale statistical operations such as Population Census, Economic Census and nation-wide sample surveys are centralised. In addition, the compilation of macro-economic aggregates like national accounts, price indices and industrial production are largely Central activities. However, the State Governments and statistical organisations of the State are also engaged in collecting and generating data on a number of variables. Even where the responsibility for policy formulation lies with the Central Ministries, the actual collection of data may be done by the State Governments through their agencies. For example, in the case of Agricultural Statistics, the crop area and yield data are collected by State Governments through various schemes initiated by the Central Ministry of Agriculture. There is, therefore a need for a high degree of coordination between the Central statistical authorities and the State-level organisations. The Statistics Wing of the Ministry of Statistics and Programme Implementation in the Government of India is the nodal agency for coordination of statistical activities and maintenance of statistical standards. For coordination with States and Union Territories, it operates through State Directorates of Economics and Statistics.

2.1.3 The Indian Statistical System has over the years built an elaborate statistical infrastructure to capture the wide variety of data generated by a very large and decentralised economy. However, due to its over dependence on the administrative set up and traditional records, the system has not been able to keep pace with the demands of statistical requirements. The process of development has also brought in significant structural changes in the economy, which need to be captured by the statistical system. While the scientific basis for the generation of data and the methodologies adopted may not be in question, in many cases, what has brought about a decline in the quality and reliability of the statistics generated by the system is the inability of the present system or procedure of collecting data to meet the quality standards.

2.1.4 Apart from the quality of data, there are other problems such as data gaps, duplication leading to conflicting statistics and inordinate delays in transmission and publication of data. In the field of Agricultural Statistics large data gaps exist with reference to the output of fruits and vegetables and other minor crops, and estimates of meat, meat products and fish. The results of 16th Livestock Census, scheduled to be completed in 1997, are still not available for a number of States. The representativeness of the Index of Industrial Production has been considered as questionable due to *inter alia* inadequate information on Small Scale Sector. One of the perennial issues relating to national income in our country has been the difference between

the National Accounts and National Sample Survey (NSS) estimates on consumption expenditure. In the area of External Sector Statistics also, the reconciliation of the data on exports and imports between the Directorate General of Commercial Intelligence and Statistics (DGCIS) and RBI is essential. Further, the present system has not been able to provide adequate information on basic socio-economic indicators required for micro-level planning. For example, although the Civil Registration System was envisaged as a mechanism to provide annual estimates of the infant mortality rate, death and birth rate, etc. at the district level, it has failed and as a result, such estimates are not available at the decentralised level. No reliable information is available on many aspects in the Health Sector like problems of the aged, contribution of private sector to health care, disease-specific expenditure on health, etc. The whole area of Services Sector is undergoing far-reaching changes with the application of Information Technology. More of intangible goods are getting exchanged. However, huge data gaps exist with reference to such transactions.

2.1.5 The Indian Statistical System, therefore, needs to improve its credibility, timeliness and adequacy. The Commission has examined the present system of collection and dissemination of statistics relating to different sectors of the economy using these criteria. For overcoming the problems identified thereby, the Commission has adopted a five-fold remedial approach:

First, reform in the administrative structure of the Indian Statistical System and upgrading its infrastructure so as to ensure its autonomy,

Second, improvement of the present system of collection of data, in relation to data that are currently being generated,

Third, exploration of alternative techniques, in relation to the existing statistics, if the present system for collecting data is under strain for whatever reasons,

Fourth, identification of new data series that may be generated in keeping pace with the expanding economy, and

Fifth, evolution of appropriate methodologies for collection of data, in relation to the new data requirements.

2.2 ADMINISTRATION OF THE INDIAN STATISTICAL SYSTEM

2.2.1 At the moment, as the system operates, there is no effective coordination either horizontally among the different departments at the Centre or vertically between the Centre and the States. The responsibilities for the horizontal and vertical coordination and maintenance of statistical standards rest with the Ministry of Statistics and Programme Implementation. However, it is found that this Ministry is not in a position to ensure that the Ministries and all State Governments adhere to certain commonly-accepted procedures. The task has become more difficult as the post of the Director General of the Central Statistical Organisation remains unoccupied so far. The lack of an effective and adequately empowered coordination mechanism is a major weakness in the system. Besides, there is no statistics policy-making body or authority for evolving a national statistical strategy.

2.2.2 For reform of administration of the Indian Statistical System by upgrading its infrastructure and thereby enhancing the credibility of official statistics, the Commission is of the view that an independent statistical authority free from political interference having power to set priorities with respect to Core Statistics is needed to ensure quality standards of statistical processes. Such an authority will also improve the coordination among different agencies collecting data. Though the National Advisory Board on Statistics was constituted with this objective, its impact has been minimal. In view of this, the Commission has recommended the creation of a permanent and statutory apex body – National Commission on Statistics (NCS) – through an Act of Parliament, independent of the Government in respect of policy-making,

coordination and maintaining quality standards of Core Statistics. The NCS will have a Chairman and four Expert Members all of whom would be eminent statisticians or social scientists and they will act on the advice of a number of technical committees on various subject areas.

2.2.3 The presence of an administrative machinery within the Government is necessary to implement and sustain the policies evolved by the proposed NCS. The Commission has, therefore, proposed a restructuring of the existing Statistics Wing of the Ministry of Statistics and Programme Implementation into a full-fledged Department of the Ministry to be known hereafter as the National Statistical Organisation (NSO). The head of the NSO will be the National Statistician and will be the Secretary to the Government of India. He or she will also be the Secretary to the National Commission on Statistics. The NSO will comprise three offices and a wing namely, the Central Statistical Office, National Sample Survey Office, Data Storage and Dissemination Office and Consultancy Wing in order to implement and maintain statistical standards as laid down by the NCS besides carrying out various other functions such as the compilation of National Accounts, apart from facilitating national and international coordination, publication of Core Statistics, the conduct of methodological research and studies, as well as arranging the training of statistical personnel and maintenance of a 'warehouse' for Core Statistics.

2.2.4 There is an increasing demand for professional statistical activities within the Government. The Commission has, therefore, recommended the creation of a body – the Consultancy Wing – under the National Statistical Organisation to utilise the expertise available within the Government in the setting up of a commercial wing for professional statistical activities.

2.2.5 A lack of coordination among the different ministries and departments of the Central Government leads ultimately to poor and unproductive statistical advice to the concerned administrative ministries and departments. To remedy this situation, the Commission recommends the appointment of statistical advisers in important ministries and departments in order to make available sound statistical inputs and advice for the purposes of policy formulation and decision-making under the technical guidance of the National Statistician.

2.2.6 Some of the State Directorates of Economics and Statistics do not play a nodal role in the coordination of statistical activities within the State and lack survey sampling and data processing capabilities. To improve the coordination within the State statistical systems, the State Directorates of Economics and Statistics must be made responsible for technical coordination with all State Departments in respect of the content, methodology and dissemination of statistics. The Conference of Central and State Statistical Organisations is another instrument, which would provide a forum for regular interaction among the Central and State statisticians. In some of the States, as the statistical cadres are generally fragmented, the constitution of an organised State Statistical Cadre is urgently required. For strengthening the statistical system in the States, the Commission has recommended a Centrally-sponsored scheme with the specific objectives of developing survey and data-processing capabilities in the States.

2.2.7 As quality issues hinge on the professional capabilities of the officers and staff engaged in producing national statistics, an important objective of the Indian Statistical System is to promote professionalism in the Indian Statistical Service. Statistical activities being skill oriented an adequate focus on human resource development is therefore necessary to sustain any reforms in the system. At the moment, there is no mechanism either for providing appropriate training to the official statisticians or for promoting specialisation among the officers of the Indian Statistical Service (ISS). The Commission, therefore, recommends the provision of appropriate training facilities for improving the skills of the ISS officers. Further, the career of an officer should be so planned that he or she can specialise in some specific areas, gradually

narrowing down the areas of specialisation over the years. There is also a need for harmonisation between the choice of individual specialisation and the goals of the organisation and for orienting the transfer and training policies consistent with the goals of specialisation. Moreover, the Commission has noted that there is stagnation in the career prospects of ISS officers due to bleak promotional avenues, which has adversely affected the system. The Commission has, therefore, recommended a one-time measure of promoting the stagnant ISS officers so as to inspire them to enhance their output.

2.2.8 The system lacks legal backing for the statistical activities. The present Collection of Statistics Act, 1953 is weak. In addition to ensuring the reliability of statistics and the efficiency of operations, a strong Act, in accordance with the federal structure of the country, should also take into account the informants' rights to privacy. Recognising the role of Information Technology for processing, transmission and dissemination of data, the Commission has recommended the establishment of strong communication links between the NSO and all other related statistical offices including the States' statistical offices through one or more Internet service providers or virtual private network.

2.3 AGRICULTURAL STATISTICS

2.3.1 Though India has a long tradition of comprehensive crop statistics, at present a steady deterioration in the quality of data on crops, which are traditionally covered under the system of Agricultural Statistics has occurred. In addition to this, there are several data gaps on new crops and ancillary agricultural activities. Despite impressive and commendable achievements in agriculture over the years, there is a growing concern over the quality of Agricultural Statistics that are now available. Statistics of crop production – both area and yield – are based on scientifically designed methodologies. These designs have been arrived at after considerable experimentation and discussion among scholars of international repute. However, the present status of crop statistics is far from satisfactory. There have been frequent revisions of crop estimates and they have been quite steep on a number of occasions. The publication of final estimates on crop production is considerably delayed. The quality of land use and crop data has suffered seriously for a variety of reasons. Village officials who play a key role in collecting land use statistics do not attach much importance to this work. Higher-level revenue officials too do not pay adequate attention to this activity at the time of supervision. All these factors have contributed to the deterioration in the quality of crop statistics even though efforts have been made to bring about improvements through the Timely Reporting Scheme (TRS) and the Improvement of Crop Statistics (ICS) Scheme. Thus the pillars on which the entire edifice of Agricultural Statistics rests have been weakened. The Commission has, therefore, made a reassessment and examined the methodology as well as the organisational improvements required for improving Agricultural Statistics.

2.3.2 The major reason for the poor quality of area statistics is the failure of the *patwari* agency to devote adequate time and attention to the *girdawari* operations while yield estimates suffer on account of the poor performance of field operations. The heavy workload of the primary agency contributes substantially to the poor quality and delay in the availability of Agricultural Statistics. In order to reduce the workload, it may not be an appropriate proposition to increase the number of primary workers, at this juncture, due to financial constraints.

2.3.3 At present, the area statistics are generated through complete enumeration in the temporarily settled States while in the permanently settled States these are arrived at through a sample of 20 per cent villages covered by the Establishment of an Agency for Reporting Agricultural Statistics (EARAS) scheme. The Commission's assessment is that adequate improvements in the quality and timeliness of area statistics can be achieved if the *girdawari* is declared as a programme of high priority and the *patwari* is mandated to carry out the crop

inspection, according to the prescribed time schedule, more importantly in the case of the 20 per cent villages under TRS and EARAS, if necessary by sparing him from other duties during that period. In addition to this, intensive supervision of the *patwari's* work by higher-level revenue officials as well as by the technical staff of the Scheme for ICS with accountability for any lapses should be ensured. Once the TRS and EARAS are put on such sound footing, it is possible to use its results for framing not only the advance estimates but also the final estimates of crop area. Further, the Commission is of the view that data from a 20 per cent sample is large enough to estimate crop area with a sufficient degree of precision at the all-India, State and district levels. The Commission has, therefore, recommended that crop area forecasts and final area estimates issued by the Ministry of Agriculture should be based on the results of the TRS in the temporarily settled States and on those of EARAS in the permanently settled States. The revised system for the estimation of crop areas will also reduce the workload of the primary data collecting agencies and improve the quality of their work.

2.3.4 The role of the scheme for ICS in locating the deficiencies in the State system of crop statistics is quite significant. The ICS reports which act as a cross check on the work done by others have brought to light several discrepancies and deficiencies in quantitative terms. Despite the fact that the ICS has commented on the quality of crop statistics with reference to individual States, there have not been much improvements in the quality. Therefore, there is a need for exploring the feasibility of using the ICS data for working out a correction factor to be applied to official statistics of crop area to generate alternative estimates of the same.

2.3.5 At present, primary statistics of crop production are collected and compiled by the State Governments and consolidated for the nation as a whole by the Union Ministry of Agriculture. The Ministry compiles the crop production figures and releases a number of forecasts of crop production. The present system of release of the forecasts has been found to be subjective. The Commission is of the view that it is necessary to make an objective forecasting based on timely and detailed information on crop condition, meteorological parameters, water availability, crop damage, etc. Though the Ministry of Agriculture has been working in this direction, organisational strengthening with professional statisticians and experts in other related fields is required. While the use of Remote Sensing Technology does offer an alternative route for the regular flow of crop statistics, there are a number of issues that require to be sorted out before this can become extensively operational. Meanwhile, the existing programmes of Remote Sensing Technology must be pursued with active cooperation from the concerned agencies.

2.3.6 The data collected through Agricultural and Livestock Censuses are required for identifying and formulating policies and programmes for the rural population. However, as the results of these censuses are not available in time, this defeats the very purpose for which these censuses are conducted. The major reasons for the delay in the availability of the results from these censuses are the gargantuan nature of the task, the heavy workload on the part of the primary agencies and a lack of adequate administrative and technical supervision over the work of primary agencies. To circumvent these problems, there is a need for conducting the censuses not as complete enumeration but as sample censuses. Further, no relationship has been worked out based on the data collected through these two censuses because they are conducted independently with different field agencies, reference periods and basic units of enumeration. In view of several operational and substantive gains, the Commission has recommended the integration of the Livestock and Agricultural Censuses.

2.4 INDUSTRIAL STATISTICS

2.4.1 The Industrial Sector is one of the important sectors of the economy both in terms of its spread over the economy and its contribution to the generation of income, employment, and foreign exchange earnings. Statistics relating to this sector, therefore, assume a crucial

importance for policy-making by the Government and for choice of suitable strategies by the Corporate Sector. Ever since India launched its development programme with the Five-Year Plan's framework, the importance of these statistics has been duly recognised. The emergence of a highly competitive environment, both at the national and global levels, has further increased the imperatives of ensuring the availability of adequate and reliable statistics. With the recent shift in policies from a framework of controls, permits and licenses towards a system of liberalisation and free flow of market forces through the process of economic reforms, a review of the erstwhile statistical system had become necessary. Further, with the growing erosion of discipline in the data generating system of the Government, the reliability, adequacy and timeliness of statistical data had been adversely affected. The Commission reviewed in this context the different aspects of Industrial Statistics in the country, such as the quality of statistics, institutional machinery for data collection and dissemination, the problem of marginalisation of the Statistical Wings of the different ministries, decline in the compliance profile of the respondents, and conceptual and methodological problems of data collection.

2.4.2 The Annual Survey of Industries (ASI) has been the principal source for most of the basic statistics of the Industrial Sector. However, the frame of factories, which the ASI uses for conducting the survey, is based on the list of factories maintained by the Chief Inspectors of Factories (CIF). A large number of units, which are qualified for inclusion in the CIF's list, have not been included and at the same time many defunct units have not been removed. The data generated by the ASI system based upon this deficient ASI frame do not therefore depict the true situation of organised Industrial Sector. Urgent steps should, therefore, be taken for making the ASI frame more comprehensive by including in it all units that are eligible for registration with the CIF, followed by an appropriate updating mechanism. With the objective of generating reliable benchmark estimates at the disaggregated level, of providing an efficient weighting diagram for revision of the base year of Index of Industrial Production and also of updating the ASI frame, the Commission has recommended a one-time census of units eligible for registration.

2.4.3 The estimates of different variables of Industrial Statistics derived by the ASI are often associated with large sampling and non-sampling errors. To enhance the credibility and utility of these estimates, sampling errors need to be published along with the estimates of important survey characteristics. Further, a periodic review of the sampling design and of the sample size in the ASI must be undertaken with the objective to improve the precision of the estimates at the industry-group levels.

2.4.4 Estimates of the growth rates of industrial production based upon the Index of Industrial Production (IIP) are extensively used for policy-making at various levels in the Government and also for decision-making in the banking and Corporate Sectors. The importance of IIP is further increased due to the fact that it is the only indicator generated every month and disseminated on a wide scale. Concern has been expressed over the large divergence between the quick and the final estimates of the IIP. The IIP is compiled and released by the Central Statistical Organisation (CSO) within six weeks as per Special Data Dissemination Standards (SDDS) norms of International Monetary Fund, based on the data received from different agencies. The Commission has made a critical appraisal of the quality of the monthly IIP as an economic indicator of the general level of the industrial activity in the economy. The functioning of the source agencies providing the primary data of industrial production to the CSO is afflicted with a number of serious deficiencies. The product coverage of IIP and the administrative and institutional framework for primary data collection are much below the desirable standards. In the new policy regime of liberalisation of the Industrial Sector, the Governmental machinery's ability to induce a good response from the industrial units for providing statistics on a monthly basis has been considerably eroded. The available legal backing by the Industrial Development and Regulation Act has also not yielded the desired response. The Commission therefore recommends

that the quality of the IIP must be improved by toning-up the statistical wings of the source agencies, in particular, within the Department of Industrial Policy and Promotion (DIPP) of the Ministry of Industry, which has a considerable share in the weighting diagram. Further, the Commission has recommended exploring the possibilities of constructing an additional IIP based on bigger units, for which collection of data could be streamlined in a more effective manner than in the case of the entire Industrial Sector.

2.4.5 The need for harmonisation of the activity, product and trade data has been evident for quite some time, as this would enable a cross-classification of activity and product data. At present, there is no uniformity in the codes being used by the organisations dealing with the collection and processing of product-level data, compelling the user to refer to different documents. In this context, the Commission has recommended an urgent finalisation of the unique coding system developed by the Central Board of Excise and Customs (CBEC) based on the Harmonised System and emphasised its simultaneous adoption by all the producer and user organisations concerned with product-level data. To give wide publicity, the information on coding structure should also be made available on an extensive basis through websites and publications. The use of national classification would eliminate the multiplicity of product-level coding systems and would also enable a study of the flow of output through various economic systems apart from a cross-classification of activity and product data.

2.5 SERVICES SECTOR STATISTICS

2.5.1 With the Services Sector's growing share in the nation's GDP, the need for establishing a well-organised mechanism that can maintain a sound statistical database for this can hardly be over-emphasised. The task becomes difficult given the vastness of the sector, its heterogeneous nature as well as fast-changing composition with the frequent emergence of new services and the exit of obsolete ones. Thus the evolving of an appropriate survey methodology for collection of data from the vast Services Sector is a real challenge.

2.5.2 The Commission has noted that for different sub-sectors of Services Sector, the estimates of the number of workers based on the existing Follow-up Enterprise Surveys of the Ministry of Statistics and Programme Implementation quite often diverge widely from the alternative estimates available from the sources like the Employment-Unemployment Surveys of the same Ministry and the Population Census. Further, data users perceive that Follow-up Enterprise Survey estimates of gross value added per worker for different sub-sectors are sometimes unrealistic. This problem should be addressed by way of carrying out methodological research to find out innovative methods of data collection. The Commission has recommended the setting up of a unit in the proposed National Sample Survey Office of the National Statistical Organisation to regularly undertake studies for bringing about improvements in the survey methodologies, including the method of data collection. Further, for the emerging areas like software exports, e-commerce, entertainment sector, and related fields, the Commission has recommended the development of a suitable methodology for estimating their contribution in employment, gross value added, etc.

2.5.3 The existing Follow-up Enterprise Surveys on the Services and other sub-sectors (excluding manufacturing and repairing sub-sectors), carried out by the Ministry of Statistics and Programme Implementation, take into account all types of enterprises (other than those in the public sector), irrespective of their size, under the same survey year. This approach to data collection might lead to improper representation of bigger units in the sample causing distortion in the estimated results. Thus the survey estimates are subject to a large margin of sampling error. To overcome this problem, the Commission has recommended the carrying out of a survey of 'bigger' units in sub-sectors other than manufacturing and repairing. For complete coverage of the sub-sectors, the residual category of relatively smaller units should be surveyed through the

existing Follow-up Enterprise Surveys. As trade and services figure in the State list, the Commission has also recommended the evolving of an appropriately decentralised survey mechanism in collaboration with State Directorates of Economics and Statistics.

2.5.4 The latest classification of economic activities, i.e. National Industrial Classification 1998 (NIC-98), that also includes activities relating to services, accepts the major features of the International Standard Industrial Classification (ISIC) 1990 (Revision 3). A comparison of the NIC-98 with the World Trade Organisation's List of Services reveal that some of the emerging activities are not specifically listed in the NIC-98. The Commission has, therefore, recommended developing a mechanism to identify such activities on a regular basis and for assigning them proper codes within the framework of NIC.

2.6 INFRASTRUCTURE STATISTICS

2.6.1 In developing a proper statistical database for the Infrastructure Sector, a major hurdle is the absence of a clear definition of "infrastructure". The Commission has defined the term by identifying certain characteristics. The Commission has also observed large data gaps in the Infrastructure Sector and recommended measures to bridge such gaps. In order to improve the accessibility of such data for policy makers and other data users, the Commission has recommended that the Ministry of Statistics and Programme Implementation should publish data on all infrastructure activities in a single document.

2.6.2 Road transport is one of the important activities of the Infrastructure sector. But the database for this sub-sector is quite weak. Thus a proper data collection mechanism should be evolved to strengthen the database. Power is another vital sub-sector where the statistics need improvement. The Commission has recommended that the State Governments should be asked to collect data pertaining to the finances of the State Electricity Boards. Further, the electricity authorities at the State and Union Territory level should publish the data for the electricity-generating units, including those in the private sector, under their respective jurisdictions.

2.6.3 Quantification of the infrastructural activities in the form of an index would help policy makers and researchers. The Commission has therefore recommended the construction of two types of indices in this regard. While the first one, called "Infrastructure Index", will provide a summary measure of the growth of infrastructure, the second one, namely, "Infrastructure Utilisation Index", will indicate the extent of utilisation of identified infrastructure facilities.

2.7 SOCIO-ECONOMIC STATISTICS

2.7.1 The Socio-economic Statistics include a vast array of information on health and disease, literacy and education, standard of living and poverty, labour force and employment status of women and gender empowerment, population parameters relevant to fertility, mortality and migration, ecology and environmental protection. A sound system for collection of Social Sector Statistics is vital for the effective development of social policy, for informed decision making on policy issues and for evaluation of the impact of social and economic policies. An inadequate system of collection and compilation of Social Statistics constitutes a major impediment to effective social development of the country. Reliable data on the above dimensions and use of these in planning, implementation, monitoring and redesigning of various developmental programmes is absolutely essential, if the country has to develop more rapidly than in the past.

2.7.2 The Commission took note of the problems on various aspects included in the Socio-economic Sector Statistics and assessed the current status of these for the country in the areas of education, health and family welfare, manpower and employment, environment, population characteristics and gender with regard to reliability, timeliness and adequacy of data available in these areas and have made specific recommendations for improving the system.

2.7.3 The Commission is of the view that in each of these areas, there are major deficiencies of data, which can be largely attributed to the near collapse of the Administrative Statistical System. The deficiencies common to all the sectors include: poor quality of data collected by the statistical system, inordinate delays, lack of effective checks, incomplete coverage, inconsistent data, poor implementation of provisions of Acts, low priority and general apathy to statistical activities, inadequate infrastructure & staff for statistical work, and lack of computerisation & its use in data compilation, processing and dissemination of data produced by different agencies. As a result, routine data on schools, students enrolled, hospitals, medical and para-medical personnel, births and deaths occurring in the population are just not collected due to a lack of proper emphasis on these items of information and the administrative back up for a compilation and analysis of the required data.

2.7.4 In the area of Population Statistics, the Population Census is one of the most comprehensive sources of information on the size, distribution, living conditions and demographic characteristics of the population. Even though the provisional population totals on limited data are released within a month of the completion of fieldwork, a considerable delay in the processing and release of detailed final results still persists, which undermines the immense utility of this gigantic exercise. The results released early are considered as provisional figures. Therefore, it is essential to have an advance calendar for the entire census operations so that all reports are released and disseminated within a time frame of three years. Another aspect, which requires immediate attention, is to reverse the sequence of data release by producing the data with a bottom up approach.

2.7.5 The Commission also highlighted the need to integrate databases relating to the administrative units of the country, while attempts could be made to develop uniform and unique area codes for districts, blocks and villages at the national level. This exercise has been attempted in the recent Census. These codes should also include geo-codes, which should be sufficient to locate them in a map.

2.7.6 The recent democratic decentralisation process initiated by the 73rd and 74th Amendments giving greater responsibilities and powers to the *Panchayats* and *Nagar Palikas* as the third tier of governance offers a new window of opportunity for local planning, effective implementation and monitoring of various social and economic development programmes in the country at the local levels. The National Statistical System should assist the various developmental agencies in this challenging requirement and it is therefore important to establish a system of data collection from the block level onwards and also their dissemination to the local bodies on one hand and further flow upwards to the district and above levels. To facilitate this, a statistical functionary is necessary, who would be the outermost peripheral link at *taluka* headquarters with a networked computer for data entry, maintenance of block-level databases, simple tabulations and speedy data transmission to higher authorities in an appropriately summarised pre-designed format.

2.7.7 In the area of Health and Family Welfare Statistics, the three Departments of Health, Family Welfare and Indian System of Medicines and Homeopathy of the Ministry of Health and Family Welfare have a separate system of data collection in their respective areas, while the Registrar General of India is responsible for collection and dissemination of vital statistics through its system of registration of vital events. The Commission has recognised that an efficient Health Management Information System (HMIS) is a prerequisite for studying the problems of health and diseases, effective administration of health services and evaluation of effectiveness and efficiency of various health programmes. It is, therefore, essential that a comprehensive assessment of the HMIS as it operates, be undertaken by setting up of a Committee and examining in detail the data requirements of the States and the Centre. Similarly, detailed data on morbidity and mortality that form the core of data requirements for any health planning strategy

are lacking and periodical morbidity surveys must be conducted to meet the data requirements of public health planners and epidemiologists. The computerisation of hospital records both in the public and private sector is needed for generation of the requisite data on health conditions. Further, recognising the increasing participation of private sector in providing health care services both in the rural and urban areas, the integration of the information from this sector with that of the Government sector is urgently needed. It is also necessary to regulate the private health sector to ensure quality of services to the public and therefore the Centre should formulate a regulatory model Act including provisions for submission of periodical statistical returns.

2.7.8 The country has a well-established system of civil registration through an elaborate machinery right up to the district level and below for registration of vital events under the Registration of Births and Deaths Act. The Civil Registration System, has the potential to generate vital rates for district level and below and form the basis for planning health and family welfare programmes at the local level as required in the 73rd and 74th Amendments. The system is however deficient and suffers from poor coverage and quality in registration. In the country as a whole the registration coverage is only 53 per cent for births and only 48 per cent for deaths and the problem is more acute in the rural areas and in a few States. There are many administrative and management factors responsible for this poor registration. The Commission is of the view that the responsibility for registration of births and deaths should be vested with *Panchayats* and *Nagar Palikas* in a phased manner starting with the States where *Panchayati Raj* institutions are well in place. The system should be a proactive one by increased involvement of local-level Government functionaries and the local bodies. The computerisation of the system of Civil Registration would also solve the problem of compilation of information that has to flow regularly into the statistical system. Other essential items are generation of public awareness on the need of registration of births, deaths and marriages and encouragement for production of birth, death and marriage certificates for various educational, employment and administrative purposes.

2.7.9 The need for information on the fast-changing composition of the labour market has been growing for appropriate assessment of demand and supply of labour in different sectors of the economy. Labour and Employment Statistics are generated largely through the implementation of various labour laws and Regulations by the States and Centre. For the unorganised sector, the National Sample Survey Organisation and Central Statistical Organisation are collecting and disseminating labour and employment-related data by conducting periodic sample surveys. The Registrar General and Census Commissioner of India is also publishing data decennially on workers and those seeking work through its census operations. The data collected by Ministry of Labour through States suffer from very poor response in submission of returns, delays in filing the returns, poor quality, under coverage and time lag in publication of results. The large number of returns to be submitted by the primary units add to the reluctance of the unit owners for a prompt response. The poor implementation of the penal provisions of the Acts for non-submission of returns by the implementing agencies has been another area of concern. The problems are largely administrative in nature and the agencies concerned should give adequate priority to the statistical aspects in the implementation of the Acts. Further, simplification and rationalisation of various returns is also required apart from use of Information Technology in the compilation and processing of data by the States. The role of employment exchanges in the changing jobs scenario needs to be assessed and redefined as a placement agency and source of labour-market information. The Ministry of Labour should also develop a database by integrating the information available from different sources in this sector.

2.7.10 Education being key to the process of human development in the country, statistics on education becomes crucial in the formulation of development policies. Ministry of Human Resource Development is the main agency for producing statistics on school education, which are

collected through the States. The All India Educational Survey conducted by the NCERT is another important source of statistics on school education in the country. In its review of the educational statistics system, the Commission took note of the deficiencies of quality, reliability, time lag and weak infrastructure in the collection and dissemination of education data. The system can be improved by strengthening the practice of record keeping, vigilant data scrutiny and verification and computerisation of district-level information. Quite a few data gaps exist in relation to educational planning, and these should be collected and published by the agencies concerned. In the area of technical and higher education the problems are still more acute as the agencies involved are collecting data for specific purposes without any coordination with the Ministry of Human Resource Development. In this area, the regulating bodies such as University Grants Commission, All-India Council of Technical Education, the Department of Agricultural Research and Education, National Council of Teacher Education and Department of Health through the Medical and Dental Councils should be responsible for collecting and disseminating the requisite data. Further, the infrastructure for collection and dissemination of education statistics needs to be strengthened at the Centre and the States by providing adequate statistical manpower and other facilities of computer hardware and software.

2.7.11 The improvement in gender statistics can be achieved by ensuring that statistics related to individuals are collected, compiled, analysed and presented by sex and age so as to reflect issues related to women and men in society. A gender perspective is needed in all traditional statistical fields. This implies that gender statistics cannot be produced and improved in isolation. Such work must be integrated with the development of the overall data collection system. Improvement of content, methods, classifications and measurements should be made part of the ongoing efforts to improve the sources of statistics, namely, censuses, surveys and administrative systems. The Department of Women and Child Development should play a proactive role and strengthen its statistical set up. Indicators of gender disparity in various aspects of education, health and employment are required to be brought out. The CSO should develop a standard methodology for the purpose of generating these indices to reflect the status of women in the country.

2.7.12 The need for conservation of environment and the related concept of sustainable development has attracted the attention of the entire world and is becoming a guiding principle of developmental planning. Environment Statistics is in its nascent stage in the country and as such there is a need to build up an efficient system for the collection of Environment Statistics and developing environmental indicators based on the international framework provided by the United Nations Statistics Division. The CSO has already taken initiatives in this direction; however, Ministry of Environment and Forests should take the primary responsibility for collection and dissemination of Environment Statistics and the CSO should continue to play the coordinating role. Another related issue is that of Natural Resource Accounting to gauge genuine economic performance and growth, taking the environmental factors into consideration. The System of National Accounts, 1993 has suggested the development of satellite accounts under a standard framework and the CSO should be responsible for the development of suitable methodologies and work in close coordination with all the concerned agencies for collecting the varied nature of environmental data.

2.8 FINANCIAL AND EXTERNAL SECTOR STATISTICS

2.8.1 The deregulation of financial markets has accelerated the pace of financial innovations and brought forth the need for regular and timely flow of qualitative financial statistics for pursuing sound macro-economic policies as well as promoting financial stability. In the context of the recent financial crises, the traditional issues in Financial Statistics such as timeliness in dissemination, accuracy, transparency, harmonisation, international comparability, etc. have come into sharper focus. In addition, many unconventional issues relating to

classification, valuation and measurement of financial transactions have also attracted attention. An efficient use of Financial Statistics requires greater harmonisation of Financial Statistics with other related system of accounts such as national accounts, balance of payment statistics, etc. The need for data standardisation, wider coverage and higher frequency has become important from the viewpoint of analysis and the establishment of linkages among various market segments. Since financial markets are much more information driven, timeliness in dissemination of reliable information assumes special importance. Furthermore, there are data gaps such as for informal markets which, depending on their size, are relevant for policy.

2.8.2 The international initiative in this direction has resulted in the IMF establishing the Special Data Dissemination Standards (SDDS) in April 1996, in order to enhance the timely availability of comprehensive statistics relating to the real, fiscal, Financial and External sectors of the economy. As a subscriber to SDDS, the concerned agencies in India have made concerted efforts to adhere to the data standards of SDDS. With the use of technology, it is possible to quickly disseminate data to a wider range of users. With a larger role for markets and increasing cross-border financial flows, transparency has assumed significance not only for market participants but also for regulators. Apart from transparency, timeliness and quality of the information made available as public good have also assumed importance. Alignment with international standards in economic, banking and financial areas is critical for the enormous efficiency-enhancing value that this offers. A further emergence of new institutions in the regulatory sphere poses new opportunities and challenges.

2.8.3 The Commission while making its recommendations on Financial and External Sector Statistics took into account this changing environment. It noted that an institutional infrastructure already exists in India for collection and dissemination of statistics on these sectors. The Reserve Bank of India (RBI) is the principal though not the sole agency for collection and dissemination of statistics in respect of Financial and External Sector Statistics. It collects and disseminates these data through its various publications, website and press releases. The other major public sector agencies and institutions that collect, compile and disseminate Financial Statistics are the Ministry of Finance, Securities and Exchange Board of India (SEBI), National Bank for Agriculture and Rural Development (NABARD) and Industrial Development Bank of India (IDBI). The Insurance Regulatory and Development Authority (IRDA) would have an important role in collection and dissemination of data with regard to the Insurance Sector. The Commission has noted that many of these institutions have been taking into account the changing environment and modifying their data collection formats from time to time. For instance, the modalities for the collection of data on the External Sector have been modified as per the recommendations of the High Level Committee on Balance of Payments, 1993, (Chairman, Dr. C. Rangarajan). The Commission also noted that by and large, the data available on Financial and External Sectors in India are in conformity with relevant international manuals on External, Monetary and Financial Statistics. However, the Commission identified some areas that need further refinement to suit the unique needs of Indian economy, the recent institutional development in the Financial Sector especially the developments in financial markets. In particular, the Commission has identified the needs in respect of data relating to fiscal, informal sector, insurance and e-commerce.

2.8.4 The monetary and Financial Statistics as well as data relating to commercial banks published by RBI are reliable, adequate and reasonably timely. However, there are deficiencies in respect of data relating to non-banking finance companies (NBFCs) and the Informal Financial Sector, which need to be addressed by RBI urgently. There is a need for NABARD to improve the quality and timeliness of data relating to co-operative banks and also to initiate surveys on financial data relating to Non-Governmental Organisations and Self Help Groups.

2.8.5 While SEBI should continue to have the primary responsibility for collection and dissemination of data in respect of capital markets, there is a need for improvement in data with regard to private placement and daily dissemination of data by all stock exchanges in a standardised format. The primary responsibility for collection and dissemination of data in respect of the Insurance Sector should naturally rest with IRDA.

2.8.6 While the data disseminated by RBI on the Government securities market compares well with international standards, there is a need to improve the coverage and timeliness of data with regard to certain money market instruments such as Commercial Papers (CP) and Certificate of Deposits (CD). As the data on money and the Government securities market are critical not only for the market participants but also for RBI in its own day-to-day monetary management, with further improvement in technology such as implementation of the negotiated dealing system (NDS), full-scale operationalisation of Very Small Aperture Terminal (VSAT), such data should be made available on a real time basis. Keeping in view the impact of fiscal policy on the Real, Financial and External Sectors of the economy, there is scope for further improvement in terms of coverage, classification and dissemination. There is also a need for establishment of a data warehouse for fiscal statistics.

2.8.7 While the balance of payments statistics compiled and released by RBI are broadly consistent with the international standards, and are disseminated widely and in a timely manner, certain discrepancies in data have, however, persisted and certain new areas have emerged which need further attention. For instance, there are continuing discrepancies in merchandise trade data, both exports and imports, between the Directorate General of Commercial Intelligence and Statistics (DGCI&S) and RBI. There is also a need for more detailed data on trade in services, which has emerged as an important component of balance of payments. In view of electronic commerce being a new and fast growing way of conducting business, there is a need for developing an appropriate methodology by closely monitoring the international trends and multilateral initiatives for data compilation.

2.8.8 Notwithstanding the progress made so far by the concerned agencies, namely, RBI, SEBI, NABARD, IDBI, IRDA and Ministry of Finance, there is a need to focus on the areas recommended by the Commission so as to further strengthen the process of collection, compilation and dissemination of the Financial and External Sector Statistics.

2.9 PRICE STATISTICS

2.9.1 Changes in the prices of goods and services affect different segments of the population differently. Thus measuring prices and their rate of change over time has become crucial to almost every economic issue, from the conduct of monetary policy to measuring inter-temporal and inter-regional economic progress. Central and State Government agencies collect the primary data on prices for varied purposes. The data on prices, both for the wholesale price index and consumer price indices, are not satisfactory. On account of existing deficiencies, such as involvement of multiple data collection agencies, use of varying concepts and definitions, non-existence of an exclusive field agency, non-standard specifications, repetition of prices due to non-response, and the meagre honorarium to data collectors, the Commission has recommended the unification of the system of price data collection so that the mechanism should take into account the requirements of all Central agencies compiling price indices. This would enhance the reliability and credibility of price data. On the issue of compilation of the Wholesale Price Index (WPI), the Commission has recommended that the revision of base year must be undertaken more frequently so as to capture the changes in industrial structure on account of liberalisation. The Services Sector has presently developed to such an extent now that it contributes significantly to country's GDP. On account of the non-inclusion of Services Sector in the existing WPI, the development of a separate price index for Services Sector is recommended. Ultimately, this

should be merged with the WPI, once the Services Sector index is stabilised and its robustness is established. The Consumer Price Index (CPI) is widely used for a variety of purposes and is also viewed as an indicator of the effectiveness of Government economic policies. However, in the absence of an all-India CPI, the WPI is currently used as a measure of inflation in India, though it is an inadequate indicator. The Commission has recommended the development of all-India consumer price indices for rural and urban areas.

2.10 CORPORATE SECTOR STATISTICS

2.10.1 The growing importance of the Corporate Sector calls for a greater transparency and availability of data. Furthermore, with the withdrawal of various direct regulatory functions of the Government such as industrial licensing, import licensing, capital issues and exchange controls, a number of avenues of collection of data have ceased to exist while the need for data for the success of indicative planning, forecasting and for research purposes has grown. Finally, the onset of the knowledge-based sectors or the new economy requires better reporting standards of certain attributes to help monitor the national economic performance and its future outlook.

2.10.2 The Corporate Sector includes not only the domestic corporates but multinational companies of various types as well. In the Department of Company Affairs (DCA), the Registrars of Companies (ROCs) are primarily responsible for provision of the basic information on the Corporate Sector and the statistical machinery in the ROCs is inadequate to deal with this task. The frame of the Corporate Sector maintained by the ROCs is highly inadequate and the available information is not properly processed for wider dissemination. Therefore, the Commission recommends a one-time census of all registered companies by the DCA, which will help to create a frame by eliminating closed or defunct companies and also to facilitate the estimation of population parameters. The ROCs, vested with the responsibilities for allotting the Corporate Index Number (CIN), should monitor the submission of annual reports rigorously for a proper implementation of the Act and for purposes of annual updation of the frame as well as improvement of the database. The DCA and ROCs should process information available in the company balance sheets and produce more comprehensive information on the different aspects of the Corporate Sector for monitoring and policy formulation. The scope of the standards of disclosure and reporting of data should be improved by including additional variables in the annual reports and the balance sheets of the Companies. Specific recommendations in this regard have been made by the Commission.

2.11 NATIONAL ACCOUNTS STATISTICS

2.11.1 In view of the decentralised character of the Indian Statistical System, the Commission is of the view that the Indian System of National Accounts should include not just the national-level accounts published by the Central Statistical Organisation but also regional accounts at the State-level and below. The term National Accounts Statistics (NAS) used in the report should be interpreted in this inclusive sense.

2.11.2 The National Accounts Statistics provides the framework for an internally consistent description of the macro economy based on the data generated by practically the entire statistical system in the country. The estimates of National or State domestic product and related aggregates and accounts are derived statistics that draw on the basic data available from various primary sources. The primary data sources fall in two broad categories: those data generated as a by-product of public administration system (land records, enforcement of various laws regulating economic activities, collection of customs duties, etc.) and those collected directly from the economic agents through sample surveys or censuses carried out by the official agencies of the Central and State Governments. For certain newly-emerging activities such as software, where the official system of primary data collection is not currently in place, the NAS also draw on selective non-official sources. The accuracy and quality of national accounts estimates depend on

(i) geographical coverage and quality of primary data which are utilised in their compilation; and
 (ii) methods, procedures and approximations used in transforming the primary data into NAS framework. While the basic concepts and methods of compilation of the NAS have been mostly standardised under the United Nations System of National Accounts (UN-SNA), procedures and approximations are shaped by the country-specific data collection system. While alternative standard methods of estimating national accounts aggregates, namely, income, expenditure and commodity-flow, are suggested to provide independent checks, data limitations often do not permit these independent consistency checks. Hence, certain internal consistency checks provided by national accounts identities are used to derive certain components as residuals. Wherever independent methods are employed, discrepancies usually appear. In such cases, a judgment is exercised about the relative reliability between the estimates obtained by independent methods and the most reliable one is taken to provide the control total and discrepancies with reference to control total are recorded as “errors and omissions”.

2.11.3 The basic (gross or net) domestic product estimates at factor cost by industry or sector of origin can be classified into two broad categories. Direct estimates are aggregates or sub-aggregates at current prices based on annually available statistics on a regular basis so that they directly reflect year-to-year variations in the contribution of the concerned economic activities to GDP. These are deflated by appropriate price indices in the case of commodity-producing sectors to derive estimates at constant prices. In the case of services, variations in annually available physical volume indicators of activity are used to derive estimates at constant prices. Indirect estimation has to be resorted to in the absence of annually available direct statistics relating to the concerned economic activity. In such cases, periodic or *ad hoc* benchmark survey-based estimates are derived for the survey year and are extrapolated backwards or forwards on the basis of mostly physical indicator(s) of activity in the sector to derive estimates at constant prices. These are then converted into corresponding estimates at current prices on the basis of appropriate price indices. The degree of approximation of indirect estimates at constant prices depends critically on the accuracy of benchmark survey-based estimates and the sensitivity of the physical indicator to the variations in the concerned economic activity relevant to national accounts estimation. By type of institutions direct estimates mostly relate to the public sector (of which the Government proper is a component) and in some cases to the Private Corporate or Factory Manufacturing Sector so that estimates relating to them usually constitute what in the Indian context is usually referred to as the “organised” sector or segment of the economy. Indirect estimates mostly relate to households (including non-profit institutions serving households) and constitute the residual unorganised sectors or segment of the economy.

2.11.4 In addition to the broad division of direct and indirect estimates, several rates, ratios and norms are used in transforming direct as well as indirect estimates into related aggregates. As distinct from the benchmark surveys used in indirect estimates, the updating of rates, ratios and norms require geographically dispersed type studies to capture regional diversities in behaviour and economic practices employed in different activities.

2.11.5 The credibility of National Accounts Statistics in the 1990s came to be questioned on two counts. One, there were frequent and often large revisions in the sectoral or aggregate estimates for the same year released at different points of time. The reason has been traced to the large revisions carried out by the various primary source agencies supplying data for national accounts. The Commission has made recommendations to improve the quality of primary data collected by the reporting source agencies as also to put in place certain institutional correctives to minimise large revisions. Secondly, there have been frequent charges, sometimes made by the officials themselves, that a very large degree of under-estimation of the level of gross or net domestic product exists. This is partially true because of the absence of official data-collecting machinery for some of the new activities like software and floriculture, which have expanded

since the economy was liberalised in 1991. However, as in other countries, indirect estimation methods and use of non-updated rates, ratios and norms that go into the estimation of GDP have unknown (downward or upward) biases. The Commission has, therefore, approached this criticism in the context of improving the database and procedures of estimation of GDP (including the updation of rates, ratios and norms) while suggesting mechanisms of data collection for as yet uncovered or inadequately covered newly-emerging activities.

2.11.6 After analysing the methods of estimation, data sources and deficiencies in NAS at the sectoral, sub-sectoral and regional levels, the Commission, while making recommendations, has emphasised the following five points:

- Improving the quality, reliability and timeliness of the existing direct estimates of NAS aggregates;
- Updating the rates, ratios and norms used in various aggregates by conducting geographically dispersed type studies at as frequent intervals as possible;
- Conducting benchmark surveys with experimentation in survey methods for improving indirect estimates of NAS aggregates;
- Guidelines for improving the regional accounts for State Directorates of Economics and Statistics (DESSs);
- Institutionalising frequent interaction between National Accounts Division of the Central Statistical Organisation and DESSs and working out a joint programme of improvement.

2.12 CONCLUSION

2.12.1 The Commission after analysing the deficiencies of the Indian Statistical System in terms of its administration and technical requirements has made several recommendations to revamp the statistical system. It may be legitimate to question how the recommendations in this Report would bring about improvements in the timeliness, reliability and adequacy of the Indian official statistics and contribute to its credibility in public perceptions and debates. In this context it may be stated that the loss of credibility in official statistics especially in the 1990s prompted the appointment of the National Statistical Commission with a wide-ranging terms of reference. The reasons were traced to: (a) deterioration in Administrative Statistics at the primary level; (b) weakening of the institutional mechanisms of vertical coordination between the Centre and the States; and (c) a similar weakening of the lateral coordination between the ministries at the Centre and the Central Statistical Organisation. The recommendations on individual subjects in the Report aim at stemming the deterioration in the Administrative Statistical System and to improve it over time. Similarly, a revival or strengthening of the established institutional mechanisms of vertical coordination has also been recommended along with several suggestive guidelines for improving the State Statistical Systems. This would go a long way towards restoring the vertical coordination. The Commission has recommended wide-ranging changes in the top structure of the Indian Statistical System to provide correctives for identified systemic deficiencies. In doing so the Commission has taken into consideration the proposed 'Mission Statement' as given below:

The Mission of the Indian Statistical System shall be to provide, within the decentralised structure of the system, reliable, timely and credible social and economic statistics, to assist decision making within and outside the Government, stimulate research and promote informed debate relating to conditions affecting people's life.

2.12.2 The proposed establishment of the National Commission on Statistics as a nodal policy-making and supervisory non-official body with statutory backing and assisted by subject specific expert groups as also its executive organ namely, the National Statistical Office with

well-defined implementing powers and headed by a National Statistician are meant to strengthen coordination in the decentralised statistical system at various levels. The proposed new institutional arrangement of statistical advisers in the various Central ministries with the responsibility of supplying the Core Statistics would help not only in ensuring coordination but also in ensuring the standards and carrying out statistical audit. The systemic view of the essentially decentralised Indian Statistical System reflected in the recommendations of the Commission would help to improve the credibility along with timeliness, reliability and adequacy. The improvements suggested would lay the foundation of a strong, robust and responsive statistical system that would cater to the needs of its various stakeholders and for enabling scientific decision-making using statistics, which is the basic requirement for good governance. The Commission is aware that the implementation of the various recommendations made in its Report requires not only additional resources but also strengthening of statistical machinery at various levels of the statistical system. The Commission urges that the Government should consider the recommendations in totality for an all-round improvement in the system in view of the strategic importance of statistics and should make available the necessary budgetary resources for effective and immediate implementation of the recommendations.



AGRICULTURAL STATISTICS

Crop Area Statistics

(Para 4.2.23)

1. As the data from a 20 per cent sample is large enough to estimate crop area with a sufficient degree of precision at the all-India, State and district levels, crop area forecasts and final area estimates issued by the Ministry of Agriculture should be based on the results of the 20 per cent Timely Reporting Scheme (TRS) villages in the temporarily settled States and Establishment of an Agency for Reporting Agricultural Statistics (EARAS) scheme villages in the permanently settled states. In the case of the North-Eastern States, Remote Sensing methodology should be used for this purpose after testing its viability.
2. The *patwari* and the supervisors above him should be mandated to accord the highest priority to the work of the *girdawari* and the *patwari* be spared, if necessary, from other duties during the period of *girdawari*.
3. The *patwari* and the primary staff employed in Establishment of an Agency for Reporting Agricultural Statistics (EARAS) should be imparted systematic and periodic training and the fieldwork should be subjected to intensive supervision by the higher-level revenue officials as well as by the technical staff.
4. For proper and timely conduct of the *girdawari*, the concerned supervisory staff should be made accountable.
5. Timely Reporting Scheme (TRS) and Establishment of an Agency for Reporting Agricultural Statistics (EARAS) scheme should be regarded as programmes of national importance and the Government of India at the highest level should prevail upon the State Governments to give due priority to them, deploy adequate resources for the purpose and ensure proper conduct of field operations in time.

Crop Production

(Para 4.3.12)

6. In view of the importance of reliable estimates of crop production, the States should take all necessary measures to ensure that the crop cutting surveys under the General Crop Estimation Survey (GCES) are carried out strictly according to the prescribed programme.
7. Efforts should be made to reduce the diversity of agencies involved in the fieldwork of crop cutting experiments and use as far as possible agricultural and statistical personnel for better control of field operations.
8. A statistical study should be carried out to explore the feasibility of using the Improvement of Crop Statistics (ICS) data for working out a correction or adjustment factor to be applied to official statistics of crop area to generate alternative estimates of the same. Given the past experience of the Land Utilisation Surveys of the NSS and the controversies they created, the Commission is of the view that the objective of redesigning of the ICS, at present, should be restricted to working out a correction factor.
9. The two series of experiments conducted under the National Agricultural Insurance Scheme (NAIS) and the General Crop Estimation Survey (GCES) should not be

combined for deriving estimates of production as the objectives of the two series are different and their merger will affect the quality of general crop estimates.

10. Crop estimates below the level of district are required to meet several needs including those of the National Agricultural Insurance Scheme (NAIS). Special studies should be taken up by the National Statistical Office to develop appropriate “small area estimation” techniques for this purpose.

Crop Forecasts

(Para 4.4.8)

11. The Ministry of Agriculture and the National Crop Forecasting Centre (NCFC) should soon put in place an objective method of forecasting the production of crops.
12. The National Crop Forecasting Centre (NCFC) should be adequately strengthened with professional statisticians and experts in other related fields.
13. The programme of Forecasting Agricultural output using Space, Agro-meteorology and Land based observations (FASAL), which is experimenting the approach of Remote Sensing to estimate the area under principal crops should be actively pursued.
14. The States should be assisted by the Centre in adopting the objective techniques to be developed by the National Crop Forecasting Centre (NCFC).

Production of Horticultural Crops

(Para 4.5.7)

15. The methodology adopted in the pilot scheme of “Crop Estimation Survey on Fruits and Vegetables” should be reviewed and an alternative methodology for estimating the production of horticultural crops should be developed taking into account information flowing from all sources including market arrivals, exports and growers associations. Special studies required to establish the feasibility of such a methodology should be taken up by a team comprising representatives from Indian Agricultural Statistics Research Institute (IASRI), Directorate of Economics and Statistics, Ministry of Agriculture (DESMOA), Field Operations Division of National Sample Survey Organisation (NSSO (FOD)) and from one or two major States growing horticultural crops. The alternative methodology should be tried out on a pilot basis before actually implementing it on a large scale.
16. A suitable methodology for estimating the production of crops such as mushroom, herbs and floriculture needs to be developed and this should be entrusted to the expert team comprising representatives from Indian Agricultural Statistics Research Institute (IASRI), Directorate of Economics and Statistics, Ministry of Agriculture (DESMOA), Field Operations Division of National Sample Survey Organisation (NSSO (FOD)) and from one or two major States growing these crops.

Land Use

(Para 4.7.7)

17. The nine-fold classification of land use should be slightly enlarged to cover two or three more categories such as social forestry, marshy and water logged land, and land under still waters, which are of common interest to the centre and States, and which can easily be identified by the *patwari* through visual observation.
18. State Governments should ensure that computerisation of land records is completed expeditiously.

Irrigation Statistics

(Para 4.8.15)

19. In view of wide variation between the irrigated area generated by the Ministry of Agriculture and the Ministry of Water Resources, the State Governments should make an attempt to explain and reduce the **divergence** to the extent possible,

through mutual consultation between the two agencies engaged in the data collection at the local level.

20. The State Directorates of Economics and Statistics (DESSs) should be made the nodal agencies in respect of irrigation statistics and they should establish direct links with the State and Central agencies concerned to secure speedy data flow.
21. Statistical monitoring and evaluation cells with trained statistical personnel should be created in the field offices of the Central Water Commission (CWC) in order to generate a variety of statistics relating to water use.
22. The Central Statistical Organisation (CSO) should designate a senior level officer to interact with the Central and State irrigation authorities in order to promote an efficient system of water resources statistics and oversee its activities.

Land Holdings and Agricultural Census

(Para 4.9.13)

23. The Agricultural Census should henceforth be on a sample basis and the same should be conducted in a 20 per cent sample of villages.
24. There should be an element of household enquiry (besides re-tabulation) in the Agricultural Census in the temporarily settled States.
25. Computerisation of land records should be expedited to facilitate the Agricultural Census operations.
26. There should be adequate provision for effective administrative supervision over the fieldwork of Agricultural Census and also a technical check on the quality of data with the help of the State statistical agency.
27. The post of the Agricultural Census Commissioner of India at the Centre should be restored and should be of the level of Additional Secretary to be able to interact effectively with the State Governments. Further, this post should be earmarked for a senior statistician.
28. The Census Monitoring Board should be revived to oversee the Agricultural Census operations.

Agricultural Prices

(Para 4.10.10)

29. The Ministry of Agriculture should prepare a well-documented manual of instructions on collection of wholesale prices of agricultural commodities.
30. The agricultural price collectors should be given thorough training in the concepts, definitions and the methods of data collection, and the training courses should be repeated periodically.
31. Workshops and training courses should be made an integral part of quality improvement. The quality of data should be determined on the basis of systematic analysis of the price data of agricultural commodities both by the Centre and the States.
32. Latest tools of communication technology like e-mail should be availed of to ensure timely data flow of agricultural prices.
33. A system should be developed to secure a simultaneous data flow of agricultural prices from lower levels to the State as well as the Centre.
34. The State agencies at the district level and below should follow up cases of chronic non-response relating to collection of data on agricultural prices.
35. The number of essential commodities for which agricultural prices are collected should be reduced to an absolute minimum, especially the non-food crops, in consultation with Ministry of Consumer Affairs and Cabinet Committee on Prices.
36. The centres of agricultural price collection should, as far as possible, be the same for the essential commodities as those for wholesale prices.

Agricultural Market Intelligence

(Para 4.11.4)

37. The functions, activities and the staff requirements of the Agricultural Market Intelligence Units should be re-evaluated and appropriate measures taken to streamline the units.

Cost of Cultivation of Principal Crops

(Para 4.12.6)

38. In view of the importance of the Cost of Cultivation Studies in the price administration of agricultural commodities and several studies relating to farm economy, the present programme should continue.
39. Focused attention should be paid to the proper organisation and management of the Cost of Cultivation Studies.
40. A review of the number of centres, methodology, sample size, the existing schedule and questionnaire, etc. of the Cost of Cultivation Studies should be undertaken.
41. The Directorate of Economics and Statistics, Ministry of Agriculture (DESMOA) should minimise the delay in bringing out the results of the Cost of Cultivation Studies.

Livestock Numbers

(Para 4.13.7)

42. The quinquennial Livestock Census should henceforth be taken in a 20 per cent sample of villages instead of a cent per cent coverage.
43. The Livestock Census should include some minimum information about the household (size, occupation, etc.) in addition to the head count for more meaningful analysis of the census data.
44. There should be a concerted effort towards better organisation and management of the Livestock Census operation through comprehensive training of the field staff and regular supervision over their work by both administrative and technical personnel.
45. Information Technology tools should be used at various stages of the Livestock Census for rapid processing and preparation of the final reports as well as improving the quality of the data.

Integration of Livestock and Agricultural Censuses

(Para 4.14.3)

46. The Livestock and Agricultural Censuses should be integrated and taken together in a 20 per cent sample of villages.
47. Before effecting the integration of Livestock and Agricultural Censuses a limited pilot investigation be undertaken to firm up the procedures of integration.
48. The periodical National Sample Survey Organisation's survey on land and livestock holdings be synchronised with Agricultural and Livestock Censuses in order to supplement as well as help in the crosscheck of information from the two sources.

Livestock Products

(Para 4.15.6)

49. The Integrated Sample Surveys should be continued and efforts should be made to fill up the existing data gaps.
50. The Indian Agricultural Statistics Research Institute (IASRI) should be entrusted with the task of developing appropriate methodologies for filling up the remaining data gaps relating to estimates of mutton, pork, poultry meat, and meat by-products.

Fisheries Statistics

(Para 4.16.10)

51. The survey design for estimating production of marine fisheries should be modified taking into account the current distribution of landing sites and the volume of catch

- at different sites. The field staff engaged in collection of data should be imparted regular training and their work should be adequately supervised.
52. The survey methodology for estimating production of inland fisheries especially with regard to running water sources (rivers and canals) should receive urgent attention and the Indian Agricultural Statistics Research Institute (IASRI) along with the Central Inland Fisheries Research Institute (CIFRI) should be provided with adequate support to develop this programme on a priority basis.
 53. The States should improve the recording of area under still water by appropriate modification of land use statistics.
 54. The discrepancies between the two sources of data namely, Livestock Census and State reports with regard to data on fishermen, fishing craft and gear should be reconciled by adoption of uniform concepts and definitions and review of these statistics at the district and State levels.

Forestry Statistics

(Para 4.17.10)

55. Remote Sensing techniques should be extensively used to improve and develop forestry statistics.
56. The State Forest Departments should be adequately supported by the establishment of appropriate statistical units to oversee the collection and compilation of forestry statistics from diverse sources on forest products including timber and non-timber forest products.
57. Arrangements should be made for storage and speedy transmission of forestry data through Information Technology devices.
58. In view of the unavoidable nature of the divergence between statistics from the two sources – land records and State Forest Departments – because of different coverage and concepts, the two series should continue to exist; but the reasons for divergence should be clearly indicated to help data users in interpreting the forestry statistics.
59. A Statistics Division in the Ministry of Environment and Forests with adequate statistical manpower should be created for rationalisation and development of proper database on forestry statistics.

Marketable Surplus and Post-Harvest Losses

(Para 4.18.4)

60. The existing methodology in conducting the surveys on marketable surplus and post-harvest losses of food grains should continue in future surveys of this type.
61. The agencies designated for the collection of information on marketable surplus and post-harvest losses of food grains should be provided additional manpower, wherever necessary, for the conduct of these surveys.

Market Research Surveys

(Para 4.19.4)

62. The Directorate of Marketing and Inspection (DMI) should establish a Statistical Cell either independently or within Market Research and Planning Cell (MRPC) with sufficiently trained statistical personnel to undertake comprehensive analysis of survey data and aid the decision-making process.
63. The Statistical Cell of Directorate of Marketing and Inspection (DMI) should identify the problems and deficiencies in the market research surveys carried out by different institutions and develop a standard methodology for uniform adoption.

Index Numbers in Agriculture

(Para 4.20.8)

64. A review of the item basket for the construction of Index Numbers of Area, Production and Yield should be undertaken immediately.

65. The item basket for the construction of Index Numbers of Area, Production and Yield should be different for different States.
66. The present arrangements for the construction and release of Index of Terms of Trade should continue.

Recording of Area under Mixed Crops

(Para 4.21.5)

67. The rates used to apportion the areas of constituent crops of major crop mixtures should be fixed for the recognised mixtures at sub-district and district levels and updated periodically.
68. Data available from surveys conducted under schemes like Improvement of Crop Statistics (ICS) over the years should be used for deciding the crop mixtures and their ratios.

Input Statistics

(Para 4.22.8)

69. The Directorate of Economics and Statistics, Ministry of Agriculture (DESMOA) should collect, compile and maintain a complete database on State-wise production, sale of tractors, power tillers, harvesters and other agricultural implements, density of such implements per hectare, investment made, level of mechanisation, adoption of water saving devices, etc.
70. A Farm Management Survey on an all-India basis should be conducted on a regular basis preferably at an interval of five years.
71. The Directorate of Plant Protection Quarantine and Storage (PPQ&S) being the apex body for plant protection should act as a depository of information on plant protection. Efforts should be made to design, develop and maintain a comprehensive database on plant protection for effective long-term uses.
72. The Statistics and Computer Unit of the Directorate of Plant Protection, Quarantine and Storage (PPQ&S) should be strengthened both in terms of statistical and computer personnel as well as computer equipment.
73. Information collected through General Crop Estimation Survey (GCES) and the scheme for Improvement of Crop Statistics (ICS) should be compiled to generate estimates on various inputs such as fertilisers, pesticides, multiple cropping, etc.

INDUSTRIAL STATISTICS

Annual Survey of Industries (ASI)

ASI Frame

(Para 5.1.24)

1. The Chief Inspectors of Factories (CIFs) should update their own lists by including those units, which ought to be there in the lists and excluding the units that do not operate.
2. The Central Statistical Organisation (CSO) and the National Sample Survey Organisation (NSSO) should take immediate steps to prepare directories of establishments (that employ at least 10 workers) based on data collected in the Fourth Economic Census and the recent Follow-up Enterprise Surveys of Economic Census, respectively so that these could be made use of by the CIFs in their work of updating the lists maintained by them.
3. The work of preparation of a comprehensive frame for selection of samples in the Annual Survey of Industries (ASI) should be taken up jointly as a task on a priority basis by the NSSO and the CSO. This comprehensive frame should be prepared by taking into account the lists maintained by the CIFs, the directories of establishments prepared by the CSO and the NSSO and information available from other sources.

4. The comprehensive frame so prepared should be updated on a continuing basis using survey and census data as well as information available from other sources. The additional resource requirements for carrying out the work should also be met.
5. The State Level Coordination Committee (SLCC) should be reconstituted with the Secretary, Department of Industry, as the Chairman and the Labour Commissioner, Chief Inspector of Factories, Director of Industries, etc. as members so as to ensure greater vigour and discipline in the task of revision of the frames.
6. The CIFs should take steps to simplify the process of de-registration of closed units so that units non-operating for a long time could be removed from the registers of factories of the CIFs.

Accuracy of the Estimates – Sampling and Non-sampling Errors (Para 5.1.29)

7. The effect of the changes made from time to time in the sampling design, including changes in sample size, on survey estimates should be analysed and the findings brought out regularly whenever such changes take place.
8. The sampling errors of estimates of important survey characteristics should be published along with the survey results.
9. The sampling design and the sample size should be reviewed to improve the precision of estimates at industry-group level. There is a need to increase the sample size for at least some of the industries where the sampling errors of the estimates are very high.
10. Non-sampling errors in the data should be regularly studied and measures should be taken to minimise them.
11. Factors responsible for wide divergence of summary or provisional results from detailed or final results need to be identified and steps taken to minimise such divergence.

One-time Census of Industries (Para 5.1.31)

12. A one-time census of industrial units which are eligible for registration should be conducted. While there should be a complete enumeration of all the units already included in the CIF list, the excluded units could be covered either by a sample or on a complete enumeration basis in the census. Such a census will help in generating reliable benchmark estimates at the disaggregated level (by geographical region, industry group, product level, etc.), providing an efficient weighting diagram for revision of the base year of the Index of Industrial Production, and also updating of the ASI frame.
13. Before such a census is launched on a full scale, an exercise on a pilot basis should be carried out to explore the usefulness of the various alternative sources of information for preparing a comprehensive frame, and also to estimate resource requirements for conducting the one-time census.

Schedule for Data Collection, Computerisation and Use of IT Network (Para 5.1.34)

14. The schedule of data collection should be rationalised to make it as respondent-friendly as possible and designed in a computer-readable form.
15. The query, 'whether the industrial unit can supply ASI data on a floppy on software to be provided' that formed part of the schedule of ASI 1997-98 but was subsequently dropped should be reintroduced. This would help in identifying units that are capable of furnishing information through floppy or other electronic media.
16. Information on input and output items clubbed under the large 'others' category should be obtained in a more disaggregated form through the schedule. Items having

- importance in value terms, at least, should be separated from 'others'. This is particularly important for the census sector units.
17. For bringing about further improvement in the quality of data and a timely release of results, the cooperation of the factories should be solicited, through the Industry Associations and Chambers of Commerce, for supplying the required information in a pre-designed format in the electronic media.
 18. Steps should be taken for data transmission from factories and field offices of NSSO to the tabulating agency in the form of digitised schedules using the countrywide Information Technology (IT) network.

Timeliness of Processing

(Para 5.1.35)

19. Further measures should be taken to ensure the timely processing of data on a regular basis and release of the final results of ASI within one year of commencement of the fieldwork.
20. An advance calendar for release of quick estimates, provisional results, and final results should be declared through appropriate media, including a website.

State Participation in ASI

(Para 5.1.37)

21. The existing system of independent tabulation of ASI data by both the agencies should continue.
22. States and Union Territories should canvass the ASI schedules in the residual units (i.e., not covered by the NSSO) in their respective States and Union Territories, either on a sample or on a complete enumeration basis, whenever the required infrastructure and resources are available. For that purpose, the Government of India should declare, under the Collection of Statistics Act the Directors of the States' Directorates of Economics and Statistics as statistical authority within the respective States, for the collection of ASI data and such other industrial statistics as the Government of India collects in its national programme.

Surveys on Unregistered Manufacture

Divergence in the Alternative Data Sets

(Para 5.2.20)

23. Uniform concepts and definitions should be adopted in the censuses and the sample surveys in defining the enterprises and workers. In case of non-uniformity, provisions must be made in the census and survey questionnaires so that it is possible to generate comparable estimates for a cross-examination of data and to take remedial measures in case of divergences in the data.
24. The advisory working groups and technical committees set up by the National Commission on Statistics should ensure standardisation of concepts and definitions in the censuses and sample surveys, to the extent possible.
25. The National Sample Survey Office should regularly study the extent of divergences in the alternative data sets so as to identify the reasons for divergences and suggest remedial measures. As the village and urban block level data of the number of enterprises and workers as per the Economic Census (EC) are used as the sampling frame for selection of villages and urban blocks in the Follow-up Enterprise Surveys, necessary measures must be taken in the EC to enhance the quality of the data.

Accuracy of the Survey Estimate

(Para 5.2.26)

26. Standard errors of important estimates should invariably be published in the reports.

27. Post-survey evaluation should be regularly carried out to identify the deficiencies in the survey methodology for the purpose of taking remedial measures.
28. There should be a regular interaction between the survey agencies and the data users to discuss the limitations of survey results with a view to taking necessary corrective steps for improving the quality of survey data.
29. Until action is completed to cover all the bigger units in the ASI frame, steps should be taken in the Follow-up Enterprise Surveys to net such bigger units by proper stratification so as to improve the precision of the survey estimates.
30. Measures such as strengthening of training, field visits and scrutiny of schedules by higher-level officers, interactive feedback session at the initial stage of the survey, etc. should be taken to minimise non-sampling errors in the surveys.
31. Other measures like shortening of schedule and creating public awareness about the data requirements should also be taken to improve the quality of the data.
32. It would be worthwhile to extend the provisions of the Collection of Statistics Act for surveys in respect of unregistered manufacture as well as other sectors as in the case of Annual Survey of Industries.

Time Frame for Conducting the Surveys

(Para 5.2.29)

33. The time frame for covering various non-agricultural activities, including unregistered manufacture, through Follow-up Enterprise Surveys (FuS) should be finalised keeping in view the periodicity of data requirements by the users vis-à-vis resources available for handling the survey work.
34. The collection of data relating to all types of unregistered manufacturing enterprises consisting of Own-account Manufacturing Enterprises (OAMEs), Non-directory Manufacturing Establishments (NDMEs) and Directory Manufacturing Establishments (DMEs) should be integrated in the FuS and it should be the responsibility of the NSSO to conduct such surveys, process the results and bring out the reports.

State Participation

(Para 5.2.31)

35. Views of the State and Union Territory Governments should be solicited and measures should be taken for improving their data processing capabilities.
36. The State and Union Territory Governments should actively involve the NSSO and the CSO in regular discussions and exchange of ideas for improvement of their system of data processing.

Small Scale Industries

(Para 5.3.13)

37. The representation of the Small Scale Industries (SSI) sector in the all-India Index of Industrial Production (IIP) should be improved by extending the coverage of items for which Development Commissioner, Small Scale Industries (DCSSI) is collecting regular monthly production data.
38. Since the frames maintained by the source agencies do not make a distinction between the registered and unregistered units, a mechanism should be devised to avoid overlapping of units belonging to SSI and other source agencies, in respect of common items for which the production data is reported by two agencies.
39. The Office of DCSSI should make efforts to compile monthly IIP as against the present practice of compiling quarterly IIP, for monitoring the trend of the Small Scale Industries. Efforts should be made to enlarge the coverage of items in order to make the index more representative of the SSI sector. The base year of the two indices namely, all-India IIP and DCSSI index should be in close proximity if not the same.

40. The Office of DCSSI should publish the index for use by the Government, private agencies and researchers.
41. The Economic Census and the Follow-up Enterprise Surveys should collect the information on “investment in plant and machinery (original value)” and “whether registered as SSI unit or not”. The Economic Census would help in providing the number of registered and unregistered SSI units while the Follow up Surveys would enable estimation of various parameters of these sectors. Similar information in ASI should also be collected to estimate the different characteristics of registered and unregistered SSI units in the total organised sector.
42. With the availability of information on the SSI sector from the Economic Census and Follow-up Enterprise Surveys, as mentioned above, the utility of conducting a future census of small-scale units should be examined. The detailed information, if any, required for the sector could be collected through sample surveys.
43. To facilitate evaluation over time, the Office of DCSSI should present data to enable time series comparison keeping in view the changes in the definition of the SSI sector.
44. The NSSO as a part of their tabulation programme should generate data on the principal characteristics relating to the SSI sector to enable cross comparison with DCSSI data.
45. Though administratively, the Small Scale Sector is divided into seven sub-sectors, which are under the control of different ministries and departments, the Office of DCSSI that is controlling the major segment of this sector, should coordinate with the remaining six departments and generate a database for the sector. Thereafter, efforts should be made to compile an index of the overall Small Scale Sector.

Index of Industrial Production

All-India Index of Industrial Production

(Para 5.4.17)

Improvements in the Existing IIP

46. The item basket of the Index of Industrial Production (IIP) should be selected in such a way that the indices are representative of the growth in the industrial sector at least at the 2-digit level of National Industrial Classification (NIC).
47. The source agencies should make available the data on the additional items to be included in the item basket. The agencies should expand their database to capture new units and new items.
48. To ensure the availability of data on new items, the Central Statistical Organisation (CSO) should regularly provide the source agencies with:
 - (a) The list of items that are just below the cut-off criteria of item selection and likely to figure in the revised item basket on the basis of the current series;
 - (b) Items identified on the basis of detailed results of Annual Survey of Industries (ASI).
49. The source agencies should also identify the important and fast-moving items for inclusion in their database for the purposes of administration and revision of IIP.
50. The base year of the Index should be revised quinquennially by the Central Statistical Organisation to adjust to the structural changes in the industrial sector.

Strengthening of Source Agencies

51. The statistical set-up in Department of Industrial Policy and Promotion (DIPP) needs restructuring in terms of statistical manpower and infrastructure, preferably by

- creating a full-fledged statistical unit under the overall guidance of a professional statistician.
52. The proposed statistical unit should be vested with the responsibility of maintenance of the frame, timely supply of monthly production data with an adequate response rate, exploring of suitable methodologies for dealing with non-response and improving the overall quality of data.
 53. The statistical set-up of other source agencies of the IIP also needs to be adequately strengthened.
 54. Since such strengthening will take some time, the agencies should, in the mean time, attempt to achieve a minimum standard for ensuring the quality and reliability of the Index, by adopting a suitable monitoring mechanism to target a response rate in terms of production of at least 60 per cent in the first month and 80 per cent at the final revision.
 55. The source agencies should correspond with the production units through fax, e-mail and telephone followed by a personal visit, if necessary, to minimise non-response. Cooperation from the Industrial Associations and State Governments should also be solicited in this context.
 56. Source agencies should preferably avoid inclusion of items for which very few units (say, less than 5) are reporting production, in order to avoid extreme fluctuations in the production data due to non-response. If, however, it is necessary to include some such items, the source agencies should make all efforts to closely monitor and collect data for these items.
 57. The problem of non-response needs greater and more detailed examination. Therefore, technical experts from the fields of industry and statistics should go into the question of whether statistical methods could be useful for the solution of this problem.

Additional All-India Index of Industrial Production

58. In view of the difficulties faced in the collection of data for compilation of IIP by the mail enquiry method, the possibilities of constructing an Additional Index of Industrial Production by direct collection of monthly production data on selected items from factories with 200 or more workers should be explored. This should first be done for one year on an experimental basis.
59. For this purpose, the Field Operations Division (FOD) of the National Sample Survey Organisation (NSSO) should be entrusted with the task of collection of monthly production data under the existing legal provisions. The requirement of additional resources for this purpose should be met.
60. Before the above suggestion of compilation of the Index is taken up, a study should be conducted to compare the annual growth rate in production, based on ASI data of recent years (for factories with 200 or more workers) and current IIP. The findings should be examined by the Standing Committee on Industrial Statistics regarding the workability and adoptability of this approach for compilation of the Additional Index of Industrial Production

Use of other Administrative Data

61. An exploratory study should be undertaken to examine the feasibility of using the production data as available with Central Board of Excise and Customs for compilation of an All-India Index of Industrial Production. The possibility of utilising data from other sources like sales tax for compilation of IIP, at least at the State level, should also be examined.

Comparable State-level Indices of Industrial Production

(Para 5.4.25)

62. The present practice of using Gross Value Added (GVA) for preparation of weighting diagram for All-India Index of Industrial Production and Gross Value of Output for State Comparable Indices of Industrial Production would result in incomparability in the two methodologies. GVA should, therefore, be used for the State IIPs.
63. Industrial Associations and State Industry Departments should be requested to impress upon their members and units to cooperate with the State and Union Territory (UT) Governments in supplying regular monthly production data to the State Directorates of Economics and Statistics so that the Comparable State-level Indices can be compiled and released regularly.
64. Coordination mechanism needs to be established between the source agencies and the States and UTs for supply of regular production data.
65. For the purpose of collection of necessary data, the State Directorates of Economics and Statistics (DESS) should be given authority as recommended by the Commission at Serial Number 22 above under State Participation in ASI.
66. Vigorous efforts on the part of the States, with the help of industrial associations and State Industrial Departments, are required to try out the mail methods i.e. fax, e-mail, etc. for collection of regular monthly production data.
67. Additional resources to the States for compilation of State-level Comparable IIPs should be provided.

TRADE STATISTICS**Improvements in the Existing System of Trade Data**

(Para 6.2.9)

1. Measures such as making available the entire code list on the website; introducing the standard query system for assigning an appropriate code for each item and feedback system from the exporters for amendment and widening the coding structure, etc. should be taken to assist the exporters in reporting the proper codes as envisaged in the Directorate General of Foreign Trade (DGFT) notification. A similar notification for imports should also be issued.
2. The possibility of releasing commodity-wise and country-wise details of imports and exports of crude oil and petroleum products should be explored.
3. An effective mechanism between the customs houses and Directorate General of Commercial Intelligence and Statistics (DGCI&S) to ensure complete coverage of all transactions in the compilation of Foreign Trade Statistics should be evolved.
4. All the Customs Houses and Ports including DGCI&S should be brought under the Electronic Data Interchange (EDI) system in a phased manner to eliminate the errors in data transfer and minimise the time-lag in the processing and release of data. Priority to bring the remaining customs houses under EDI scheme should be given to those ports where the volume of trade transaction is significant.
5. DGCI&S should take steps to bring out the publications, *Monthly Statistics of Foreign Trade of India* and *Statistics of the Foreign Trade of India* by Countries within a period of about one month from the release of aggregate foreign trade data through the press note. In such a situation, the monthly Brochure entitled, *Foreign Trade Statistics of India (Principal Commodities and Countries)* can be dispensed with.
6. DGCI&S should make available on website the key results of Foreign Trade Statistics released through its various publications.

Inter-State Movement/Flows of Goods

(Para 6.3.19)

7. DGCI&S should devise a standard format for collection and presentation of data on inter-State trade for all modes of transport. This method of presentation should also enable its comparison with foreign trade data. The possibility of using National Product Commodity Codes developed by Central Board of Excise and Customs (CBEC) and others should be explored.
8. DGCI&S should be given the responsibility for coordinating and monitoring of data collection from the various agencies associated with different modes of transport.
9. Forms used by the different agencies in recording the basic information for the various modes of transport should be standardised.
10. The DGCI&S should take data from the zonal railways through electronic media instead of computer printouts in a standard format for the purposes of computer processing and inclusion in their publications.
11. A specially-designed Enterprise Survey should be conducted for collection of data on movement of goods by road transport. The feasibility of conducting sample surveys by the revenue or transport authorities to assess the volume of Inter-State Trade by road through copies of invoices collected at check-posts of the State borders should also be examined.
12. Feasibility of collecting relevant data by introducing logbook system should be explored.
13. The River-borne Trade data should be shown separately and should not be clubbed with Rail-borne Trade as is presently being done.
14. The commodity-wise details of air-cargo movement should be collected and presented as in case of other modes of transport. The movement of cargo by private airlines should also be covered.

Generation of Data on Exports by State of Origin

(Para 6.4.3)

15. Pilot surveys based on the addresses of exporters as available in EDI and non-EDI data should be conducted to know whether exporters are aware of the actual origin of the goods or can give information only on the place or State of Procurement.
16. If found feasible, appropriate modification in the Shipping Bills should be made to collect the information relating to place of procurement and State of Origin.

Index Numbers of Foreign Trade of India

(Para 6.5.4)

17. DGCI&S should immediately revise the current base year (1978-79) of indices of Unit Value and Quantum of Foreign Trade and the corresponding indices of terms of trade.
18. DGCI&S should compile and release the series of indices on Bilateral Foreign Trade following the methodology suggested by the Technical Committee constituted within a period of one year.

Product Classification: Harmonisation of Code

(Para 6.6.4)

19. The 8-digit coding system being developed by the Task Force constituted by CBEC should be finalised urgently and also stress upon the need to adopt this national classification code based on Harmonised Commodity Description and Coding System (HS) by all the producer and user organisations engaged in product-level data. The use of national classification would eliminate the multiplicity of the product-level coding system and would also enable a study of the flow of output through various economic systems apart from cross-classification of activity and product data.

SERVICES SECTOR STATISTICS

Devising a Proper Classification of Services

(Para 7.2.10)

1. The work of identification and the preparation of a list of new activities in the Services Sector that are coming into existence should be carried out on a regular basis.
2. All such activities should be assigned proper codes within the framework of National Industrial Classification (NIC) and International Classification, periodically by the Central Statistical Organisation (CSO) for the benefit of user organisations with a view to maintaining international comparability.
3. The suggested list of new activities with their codes should be released through the website as well as other media.
4. Of these new activities, those, which are important at the international level, should be taken up with the organisations like World Trade Organisation (WTO), International Monetary Fund (IMF), etc. for their proper representation in the international classification.
5. Periodic revision of NIC should be attempted within a reasonable time frame after revision of the classification takes place in the international scenario.
6. The CSO should monitor the work stated above.

Assessing the Quality of the Survey Estimates

(Para 7.3.9)

7. A unit in the proposed National Sample Survey Office of the National Statistical Organisation should be set up to regularly undertake studies for bringing about improvement in the survey methodologies, including method of data collection, and also suggest measures for minimising non-sampling errors in the surveys. The National Sample Survey Office should publish standard errors of important estimates in the survey reports. These recommendations on the improvement of data quality and release of standard errors of estimates are relevant for surveys pertaining to numerous areas including the Services Sector.

Finding out Ways and Means to Collect Data for Emerging Areas

(Para 7.4.6)

8. A suitable methodology should be developed to estimate the contribution of emerging areas like software exports, e-commerce, Entertainment Sector, and related fields in employment, Gross Value Added (GVA), etc.
9. An appropriate mechanism to compile data related to the Non-Profit Institutions Serving Households (NPISHs) including Non-Governmental Organisations (NGOs) at the national and State level should be evolved.
10. An integrated system to improve the database on scientific and technical manpower (knowledge workers) should also be evolved.
11. The Ministry of Statistics and Programme Implementation (MoS&PI) should be entrusted with the responsibility to operationalise these recommendations.

Introducing a Survey of Non-Manufacturing Industries (Bigger Units)

(Para 7.5.9)

12. To improve the database, it would be desirable to carry out a survey of bigger units in the sub-sectors other than manufacturing and repairing. For this, an appropriate method of data collection and other methodological aspects need to be first worked out. Also, as the subjects of trade and services are in the States' domain, it will be necessary to decide upon an appropriately decentralised survey mechanism in collaboration with States.

Working out a Proper Time Frame for Follow-up Enterprise Surveys of Economic Census (Para 7.6.4)

13. A proper time schedule for covering various activity groups with specified periodicity should be framed by the MoS&PI and strictly implemented for providing benchmark estimates required for national accounting.
14. While finalising the said time schedule, efforts should be made to evenly group various activities among different survey years.

INFRASTRUCTURE STATISTICS

Notion of Infrastructure (Para 8.2.23)

1. The list of infrastructure activities should be finalised by the Ministry of Statistics and Programme Implementation (MoS&PI) on the basis of the characteristics recommended for identification of infrastructure.
2. Data gaps have been identified for many infrastructure sub-sectors. Steps to bridge this gap should be taken by the respective authorities namely, Railway Board (Railways); Ministry of Road Transport and Highways (Roads); Director General, Civil Aviation (Airways); Ministry of Shipping (Waterways); Department of Telecommunications (Telecommunications); Central Electricity Authority (Electricity); National Sample Survey Organisation, National Buildings Organisation, and Office of the Registrar General and Census Commissioner (Housing Services); Department of Post (Postal Services); Ministry of Urban Development and Poverty Alleviation (Urban Infrastructure); Ministry of Rural Development (Rural Infrastructure); Planning Commission (Energy Sector excluding Electricity); and MoS&PI (Infrastructure Indices).
3. A mechanism to collect reliable data on the infrastructure activities should be evolved immediately by the respective authorities in consultation with the MoS&PI.
4. Considering that Infrastructure Statistics are generated in different sub-sectors, for the benefit of the users, data on all infrastructure activities should be published in one document by the MoS&PI so as to improve the accessibility of such data to policy makers and other data users.

Strengthening Infrastructure Statistics

Railways (Para 8.3.5)

5. The Railway Board should make the Annual Statistical Statement, which at present gives zone-wise data in the form of an unpublished and internal document, widely available.

Roads (Para 8.3.18)

6. Statistical cells within the Public Works Departments (PWDs) should be set up, which should coordinate with various agencies in the matter of collection, compilation and dissemination of Road Statistics. Such data collected by the PWDs should be made available to the Transport Research Wing of the Ministry of Road Transport and Highways that should then take steps to publish these.
7. Detailed data with respect to the bigger and/or significant Road Transport Sector units should be collected through the proposed Survey of Non-Manufacturing Industries (SNMI).

8. Improved method of data collection should be tried by the MoS&PI to generate the Road Transport Statistics through both the SNMI and the Follow-up Enterprise Surveys that should exclude enterprises covered under the SNMI.
9. A mechanism should be evolved to improve the Road Transport Statistics by way of compulsory furnishing of essential information at the check posts and their processing on an appropriate sampling basis.
10. Compulsory furnishing of certain minimum statistics by the transport operators at the time of renewal of licensing should be enforced. Statistical cells in the Regional Transport Offices (RTOs), with proper infrastructural facilities, should be set up to compile the data furnished by the transport operators at the time of renewal of licensing and disseminate the same in a prescribed format.

Airways

(Para 8.3.21)

11. The data-collection system for the private sector should be strengthened and identified data gaps be addressed.
12. The Director General, Civil Aviation should publish the data on airways for both the nationalised and private airlines.

Waterways

(Para 8.3.24)

13. The prevalent statistical system for the sector should be modernised through application of advanced Information Technology.
14. A mechanism should be evolved by the Ministry of Shipping to collect data from individual shipping companies, which own one or two vessels in most of the cases.
15. Full-fledged statistical cells should be created in the Inland Water Transport (IWT) Directorates of the State Governments to strengthen the database for IWT Statistics.
16. Such statistical cells should be charged with the responsibilities of collection, processing, compilation and dissemination of IWT data not only for the IWT vessels operated by the IWT Directorates but also for the vessels as well as country crafts owned and operated by private companies and individuals.
17. The Ministry of Shipping should be made responsible for publishing data related to this IWT Sector.

Telecommunications

(Para 8.3.29)

18. With the opening up of telecom services to the private service providers, they should be mandated to furnish the required information to the Department of Telecommunications on a regular basis.
19. The overall responsibility of publishing telecom data for both the public and private sectors should rest with the Department of Telecommunications.

Electricity

(Para 8.3.34)

20. The Central Electricity Authority (CEA) should remove the delays in release of Electricity Statistics.
21. The electricity authorities at the State and Union Territory level should publish the data for the electricity-generating units, including those in the private sector, under their respective jurisdictions.
22. State Governments under whose jurisdiction State Electricity Boards (SEBs) operate should be asked to collect data pertaining to the finances of the SEBs.
23. In order to improve the data coverage and timely dissemination of Electricity Statistics, the CEA should strengthen its existing cell with statistical expertise.

Housing Services

(Para 8.3.42)

24. The National Sample Survey Organisation (NSSO), National Buildings Organisation (NBO) and Office of the Registrar General and Census Commissioner of India should take steps to bridge the data gaps on Housing Statistics through surveys and censuses.
25. The local self-governments should be involved in compilation of Housing Statistics based on the house completion certificates. The concerned Ministry in each of the State and Union Territory Governments should consolidate the information for the State or Union Territory and release the same.
26. An expert group should be set up by the NBO to examine the collection mechanism of prices of building materials and wage rates for suggesting improvements in the mechanism of data collection and dissemination.

Postal Services

(Para 8.3.47)

27. The database on postal services should be strengthened by the Department of Post to have zone-wise data, including the data on revenue collected from different categories of postal services, origin-destination of postal traffic and timeliness of delivery.
28. In order to reduce delays in the release of statistics, qualified statistical staff should be provided at least in the major postal circles.
29. The system of dissemination of Postal Statistics should be improved by introducing the latest information technologies.
30. Information on the operations of courier services should also be collected through the proposed Survey of Non-Manufacturing Industries and Follow-up Enterprise Surveys.

Urban Infrastructure

(Para 8.3.52)

31. An official publication on Urban Infrastructure Statistics should be brought out by the Ministry of Urban Development and Poverty Alleviation.
32. The publication should cover the identified data requirements, data gaps as well as other emerging requirements.
33. The States' Directorates of Economics and Statistics should vigorously pursue the programme of compiling and publishing Municipal Year Books.

Rural Infrastructure

(Para 8.3.55)

34. The possibility of bringing out a publication on Rural Infrastructure Statistics should be explored by the Ministry of Rural Development.
35. The publication should cover all the identified data requirements, data gaps as well as other emerging requirements.

Energy Sector excluding Electricity

(Para 8.3.58)

36. Efforts should be made by the Ministry of Non-Conventional Energy (for Solar Energy); Ministry of Petroleum and Natural Gas (for Petroleum and Natural Gas); Department of Atomic Energy (for Nuclear Energy); and Ministry of Coal (for Coal) to provide data pertaining to Energy Sector (excluding electricity) to the Planning Commission which should then produce a comprehensive document covering the identified data requirements as well as other emerging requirements.

Construction of Infrastructure Indices

(Para 8.4.11)

37. For devising a summary measure of the state of infrastructure in the country, two suggested infrastructure indices – one being a general index and the other an utilisation index – should be constructed by the MoS&PI. A Special Committee should be set up by the MoS&PI to look into the details of construction of these indices.
38. Although coverage of infrastructure facilities to be included in the indices may be modest in the initial stage, its scope should be widened in a gradual manner.
39. The weighting pattern of the indices should be revised every five years so that the indices are representative of the actual state of affairs in the Sector.

SOCIO-ECONOMIC STATISTICS

Population and Basic Statistics at the Local Level

Population Census

(Para 9.2.16)

1. A timetable for the conduct of various activities of the Population Census right from preparatory work, enumeration work, data processing and tabulation should be finalised sufficiently well in advance and adhered to strictly. To begin with, the plan of release of tables of the Census 2001 must be drastically changed and the census organisation must give the highest priority to speedy data entry and processing of the Census 2001 to bring out all the final tables within a period of three years. Similar timetable should be prepared for all future decennial population censuses. For achieving this task, necessary help from the Public Sector Undertakings and the Private Sector should be taken.
2. The census organisation must accord utmost priority for modernising the entire census operations by acquiring modern processing equipments and utilising the latest technological advancements in the field of information technology and printing for speedier processing and dissemination of census results. The highest priority should be given to tabulate as much data as possible at the district and block levels. These data should be made available to the rural and urban local authorities and district planning authorities without much delay so that programmes for local development are based on latest official data. Tabulation plans and data presentations should be from bottom up levels rather than attempting to provide an aggregated national picture. The usual sequence of data release is to produce key tables for all India and States first, followed by State tables and only at the end; the Primary Census Abstract (PCA) becomes available in published form. It is not necessary to stick to this pattern in the interest of providing early data at the local levels.
3. There is a need to think afresh about the Post Enumeration Check (PEC) by modifying the old sampling design in consultation with sampling experts. Further, to enhance the credibility and faith in census operations, the PEC should be entrusted to an independent agency or a group of agencies.
4. There is a need to re-examine the issue of non-publication of information such as, cross-classification of data on religion, caste and language by literacy, work, migration, etc. in the census. Further, data on most of the social and cultural aspects should be provided at least at the district level.
5. The literacy data for age 15 years and above, which is the internationally accepted minimum age for which literacy data are published, should be released on priority basis.

6. In the Census 2001 and Census 1991, the definition of economic activity has been expanded by including cultivation of certain crops for self-consumption. The Census 2001 tabulation plan must provide the details so that the contribution of additional economic activities included in the year 2001 is available separately to enable comparability with the results of the Census 1991. The Census should strive to adopt standardised concepts and definitions for comparability of data from other sources and to meet international standards. However, as far as possible, data according to the previously used concepts and definitions should also be made available separately, for comparison across the censuses.
7. Considering the increasing functional requirements and growing expectations from census, the status of the Census Commissioner and of the statistical officers providing statistical support to the Census Commissioner should be upgraded. The Fifth Central Pay Commission has also recommended upgradation of post of Census Commissioner to the Additional Secretary level and one post of Joint Registrar General of India (RGI), to the level of Joint Secretary. It is, therefore, recommended that the Census Commissioner should be upgraded to the Chief Census Commissioner in the rank of Additional Secretary and supported by one Census Commissioner from Indian Statistical Service in the rank of Joint Secretary to provide the requisite technical support to the Chief Census Commissioner.
8. The work of Registrar General of India and Census Commissioner should be separated. The job of the Registrar General of India should be to implement the provisions of Civil Registration Act and conduct of related surveys, while that of Census Commissioner should be to manage the census operations. Since the job of the RGI involves a lot of statistical expertise as surveys such as Sample Registration System, Causes of Death, etc. have to be conducted, the post of RGI should be manned by an officer at the Joint Secretary level from Indian Statistical Service. The RGI should function under the overall guidance of the Chief Census Commissioner.

Basic Statistics for Local Level Development

(Para 9.2.22)

9. The Population Census provides valuable information on a number of items/variables of the population from village level upward that is published in the District Census Handbooks. The primary census abstract for Census 2001 at each village and community development block level should be compiled at the earliest and made available to the *panchayats* and local bodies for planning and development.
10. A minimum list of variables/indicators that should be collected at village level should be identified and a system of their compilation and aggregation should be established. Similarly, the variables and indicators required for aggregation at the district, State and National levels should also be identified. The community block should be the first level of aggregation for village level information.
11. Blocks should have qualified statistical personnel (e.g. Block Statistical Assistant) with facility of a personal computer (PC), networked to district where data required at the district level would be aggregated. Such a statistical functionary already exists in many States. This statistical functionary should be trained in data entry, simple database systems, tabulations and data transmission to higher authorities and to *panchayats* below in appropriately summarised pre-designed format.
12. The data compiled by all Government departments at the village and block level in respect of the identified variables/indicators should be supplied to the Block Statistical Assistant periodically, who will maintain the block level data and also disseminate the same to the *panchayats*/local bodies on one hand and to the district on the other hand. A system for ensuring a regular flow of information from all the

- Government departments to the block level statistical personnel should be established.
13. The additional data required to meet the specific requirements of local level planning should be decided and collected at the local level itself without any prescription from the district and State levels.
 14. A Committee of Experts comprising representatives from the concerned agencies should be constituted to review the efforts already made in the past by various Groups and Committees and suggest a minimum list of variables on which data need to be collected at the local level for rural and urban areas. The Committee should suggest a comprehensive scheme for collection of this dataset in pre-designed formats, data sources, periodicity of updating, aggregation level (block, district, State and National) for each variable, agencies responsible for collection, compilation and aggregation, and transmission of information from blocks downwards to *panchayats*/local bodies and upwards to district, State and National levels. The Committee should complete its work in a time bound manner and its recommendations after due examination should be implemented by the Government within the suggested time frame.
 15. For the variables, on which the data are not compiled and updated periodically based on regular administrative records or frequent sample surveys, but data on which are necessary for planning at district and lower levels, attempt should be made to estimate them through the use of small area estimation techniques, since the present large scale sample surveys usually provide estimates of various parameters only at State and National levels. Studies for developing appropriate small area estimation techniques for estimating socio-economic parameters at the disaggregated level should be taken up by the National Statistical Office.

Uniform Area Codes for Districts, Villages and Urban Blocks

(Para 9.2.23)

16. Attempt should be made to develop uniform area codes for districts, blocks and villages at the National level, which would facilitate permanent and unique identification of every village and urban block in the country. These codes should include, as a part, necessary geo-codes, which should be sufficient to locate them in a map.
17. Village level digitised maps showing data on minimum variables and indicators can be produced with the presently available satellite image based mapping procedures. Geo-codes should be developed on the basis of these base maps. The geo-coding of the primary unit areas such as villages and urban blocks within such a map can be taken up in consultation with agencies such as Indian Space Research Organisation, Census Commissioner, Surveyor General of India and Anthropological Survey of India.

Centralised Database of Citizens (Population Register)

(Para 9.2.27)

18. A centralised database of the citizens of the country with a system of issuing a unique identification number/card has several potential benefits to its citizens and will improve the efficiency of administration. The project, if implemented, will have obvious benefits to the statistical system.

Health and Family Welfare Statistics

Health Management Information System

(Para 9.3.13)

19. A comprehensive assessment of the Health Management Information System (HMIS) should be made by a small Committee quickly and HMIS be reintroduced in

- the country in a phased manner with necessary modifications. The combined HMIS format should be separated into programme-wise modules. While revising the programme modules, care should be taken to meet the data requirements of both the Central and State Governments. Flexibility should be given to the States and UTs to include additional items to meet their State specific data requirements.
20. Steps should be taken to rationalise and minimise the number of records and registers maintained by the peripheral health workers such as ANMs and public health inspectors to reduce their burden and to improve the quality of data. The minimum data set on which data from the grass root levels should be regularly collected along with their periodicity should be clearly identified.
 21. There is a need for computerisation of the administrative records of all specialised hospitals and general-purpose hospitals and other treatment facilities both in the public and the private sectors. The International Classification of Diseases (ICD-10) Coding System for Medical Records should be adopted for generating morbidity and mortality data. There should be systematic training given to all medical personnel on the use of ICD.
 22. The system needs to be revamped and expanded to include information on private sector health facilities by adopting an integrated approach for capturing data on both allopathic and Indian System of Medicine and Homeopathy.
 23. Data relating to non-communicable diseases such as cancer, diabetes, mental disorders should also be collected through the HMIS.
 24. A suitable mechanism to collect the data at the grass roots level and its upward transmission to the district, State and the National level should be evolved and for that methods of data collection, transmission, and processing must be modernised. As National Informatics Centre facilities are inadequate to meet the requirements of HMIS, adequate funds need to be provided for necessary hardware, software and connectivity and training of personnel.
 25. The Central Bureau of Health Intelligence (CBHI), which is at present a part of Directorate General of Health Services (DGHS) should be separated and upgraded to a full-fledged Directorate of Health Statistics (DHS) directly under the Department of Health. An officer from the Indian Statistical Service at the Additional Secretary level should head this Directorate and act as the Statistical Adviser to the Department of Health. Also required posts of supporting officers should be created. The DHS should be the nodal agency in matters of health statistics and should advise the Department in all matters related to the collection of Health Statistics; coordinate with the National Statistical Office; agencies in the Central and State Governments as well as international agencies in matters related to medical and health statistics.
 26. The CBHI upgraded as DHS should be strengthened with adequate Electronic Data Processing (EDP) personnel and existing personnel should be trained in EDP operations, to enable the processing, tabulation and presentation of the large volume of data on health. Adequate funds out of the national health programmes should be earmarked for development and maintenance of information system as well as for verification of field level performance data through independent agencies.
 27. In order to facilitate effective implementation of the HMIS in the States and UTs, the State Department of Health and Family Welfare in every State should have a Statistical Division headed by a senior level statistical officer. In the districts, a health statistics cell should be set up in the Office of Chief Medical Officer (CMO) to implement HMIS and to take care of all health and family welfare statistical activities of the district.

28. All States should bring out District Health Profile for each district containing information on medical and health facilities, personnel employed in health facilities, public health information, epidemic situation of the district, etc.

Data on Morbidity and Mortality at Disaggregated Levels

(Para 9.3.15)

29. There should be periodic sample surveys of households on morbidity in the country, by trained investigators taking in to account the seasonal variations in diseases. These data should be analysed as quickly as possible and the morbidity patterns in the country should be published regularly. The National Statistical System should bring out regularly the morbidity and mortality patterns in the different age groups at least at the district/regional levels including for the diseases like T.B. and AIDS.
30. The morbidity and mortality surveys should be conducted in two stages. While at the first stage, the data could be collected on a fairly large sample; at the second stage, data from a sub-sample may be collected and verified by trained medical functionaries on certain specific aspects like causes of death, maternal mortality audit, etc.
31. As recommended by the Khusro Committee, the quality of data on infant, child and maternal mortality can be greatly improved by conducting comprehensive sample surveys of pregnant women and by a follow up of these over one or more years after childbirth. Such surveys can be conducted on a small scale at local levels.
32. There should be a procedure for medical certification of the cause of death to be implemented at least on a sample basis throughout the country regularly, in order to have a better understanding of the causes/factors underlying deaths in the country. The death records should include symptom-based information on the possible cause of death.
33. The scheme of Medical Certification of Cause of Death (MCCD) envisaged under the Registration of Births and Deaths Act, 1969 should be strengthened. The State Governments should attach a high priority to the implementation of this scheme both in the rural and urban areas. There should be a system for prompt reporting of deaths due to certain diseases, like cholera, polio, malaria, diphtheria, etc. so that immediate preventive and curative measures can be taken.
34. The statistical system in all hospitals, nursing homes and other treatment facilities and dispensaries including those in the private sector should necessarily include certain basic information on each patient and this information in prescribed formats should flow to Health Statistical System within a fixed time frame. Computerisation of birth, morbidity and mortality records should be done in phases and should be coded with ICD-10 codes to facilitate processing.

Data on Expenditure and Social Consumption on Health

(Para 9.3.17)

35. The Ministry of Health & Family Welfare in consultation with the concerned Central Ministries, Planning Commission, State Governments and other concerned agencies should develop a suitable mechanism for collection and dissemination of plan and non-plan expenditure on infrastructure and manpower in the health sector, data on investment and expenditure from private organisations, NGOs and externally assisted projects.
36. The data on availing health facilities and expenditure by households should continue to be captured more comprehensively from the NSSO's surveys, which should be conducted on a quinquennial basis.
37. The cost of specialised treatment in respect of certain diseases such as kidney transplant, cardio-vascular surgery, etc. should be compiled institution-wise and published at least on an annual basis for the benefit of public. The NGOs and

Medical Associations should be encouraged to publish and disseminate this information.

Information from the Private Health Sector

(Para 9.3.19)

38. The Centre should formulate a model Act for registering and regulating health facilities in the private sector. All the States should bring out State level Acts for this purpose on the lines of the model Act. A system of periodical filing of statistical returns with the statutory body should be established. The law should have provision for penalty and even deregistration for failing to file such information with the statutory authority.
39. The statistical system in all hospitals and dispensaries should necessarily include certain basic information on ailments of inpatients and outpatients, health personnel, health infrastructure such as number of beds, income and expenditure, etc. and such information on a regular basis should be furnished to the National Statistical System, so as to become a part of an improved database on health.

Information for Manpower Planning in the Health Sector

(Para 9.3.21)

40. The statistical system in the Medical Councils concerned with Allopathic, Homeopathic, Dentistry, Indian System of Medicine and paramedical personnel should be strengthened to provide updated data on number of medical and paramedical personnel in both the rural and urban areas at least upto the district level.
41. The information on all medical practitioners, dentists, paramedical personnel, pharmacists and nurses of various systems should be compiled by the Councils and be made available at the district level and should be updated every two years. They should also be made available on Internet.

Methodology for Couple Protection Rate

(Para 9.3.22)

42. The data on Couple Protection Rate (CPR) provided by the Department of Family Welfare should be critically looked in to for the relation it bears to actual contraceptive prevalence rate. Suitable modifications should be made to re-define the data needs on contraceptive acceptance, use of family planning methods and computation of the couple protection rate from official statistics.
43. The methodology for estimating the Couple Protection Rate (CPR) should be revised, if necessary in view of the recommendations made by the Committee set up by the Department of Family Welfare for this purpose.

National Family Health Surveys

(Para 9.3.23)

44. National Family Health Surveys similar to those conducted in 1992-93 and 1998-99 should be conducted periodically using national resources, if funds are not available from any other agency.

Use of Information Technology in Improving Health Statistics

(Para 9.3.24)

45. Steps should be taken for the adoption of Information Technology and introduction of a unified system of computerisation and networking for data transmission from one level to another, to reduce delays in transmission and compilation of Health Statistics, and to improve the data quality, to derive various indicators and to retrieve information promptly on health related issues as and when needed.

Civil Registration System

(Para 9.3.32)

46. There should be a more pro-active Civil Registration System in place of the existing passive system. In rural areas, *panchayats*, local bodies and other basic and primary workers apart from Auxiliary Nurses, Midwives, Village Watchmen, should play an active role in informing the Registrar about the occurrence of vital events. They should collect birth and death information from households and deliver the same to the Registrar. All States should implement this as a part of strategy to improve the registration. This can be achieved by giving the local level workers the responsibility for informing and collection of reports of events and getting them registered.
47. Within a State, as far as possible, only one department of the Government should be responsible upto the district level for implementing the provisions of the Registration of Births and Deaths (RBD) Act. Where multiple departments are involved, inter-departmental coordination committees should ensure effective and periodic reviews to propose measures for improving registration levels and provision of registration services by drawing up a plan of action. This requires tight monitoring and supervision of the registration work at the field level.
48. Recognising the increasing role of local self-governance in the light of the 73rd and 74th Constitutional Amendments and considering the fact that quite a few States in the country have already taken initiative in this direction, the *panchayats* in the rural areas and Municipalities in the urban areas should gradually be given the responsibility for registration of births, deaths and marriages.
49. Sufficient resources should be provided to the agencies implementing the RBD Act. The Planning Commission should provide funding to the States for this purpose. Further, to improve the availability of required forms and registers used for registration of vital events, the Central Government should bear the expenditure on this account.
50. Regular training programmes should be organised by the States for Registration officials at all levels. The 'Registrar's Manual for Registration of Births and Deaths' being prepared by RGI should be made available to all concerned, and training programmes should be conducted to impart training to all Registrars in the use of the manual.
51. The revamped system of registration of births and deaths in the country introduced by Registrar General of India, mainly with a view to strengthen the statistical functions of the CRS and to reduce paper work at the level of the local Registrar, by facilitating computerised data entry, easy retrieval of records and reducing storage requirements of records, should be vigorously implemented in all the States. There should be special emphasis on the monitoring and supervision of the system particularly for poorly performing States in order to enhance their performance.
52. Production of birth and death certificates should be encouraged for various purposes, as it will help in improving the overall registration of vital events. For example, the production of birth certificates should be made mandatory for entering the name of new-born child in the ration card, school admission, etc. and death certificates for settling insurance claims and for inheritance of property by legal heirs, in case it is not so already in any State and UT.
53. Considering the stated goal in the National Population Policy of 100 per cent registration of marriages by 2010, sustained efforts should be made to achieve this goal through the Civil Registration System by suitably amending the RBD Act for registration of all marriages and divorces.
54. Public campaigns should be launched to create awareness among the general public about the need and importance of registration of births and deaths. Also steps should

be taken to improve customer services by making registration centres more visible, prompt issue of birth and death certificates, simplifying the procedure, making registration in big hospitals more efficient, and proper preservation and maintenance of records of vital events.

55. Acknowledging the fact that an efficient Civil Registration System is the lasting solution to produce a regular series of vital rates e.g., fertility, mortality, etc. specific for age, sex, and educational level upto the district and even lower levels, the ultimate goal should be to put in place the Civil Registration System in the next 10 years and to use the Sample Registration System (SRS) as a source of data for longitudinal study of the social dynamics of the country and as a means of validating the CRS data.
56. Recourse to Information Technology (IT) should be taken for establishment of an effective system of civil registration that would provide prompt service to the public and help in quick retrieval of information for both administrative requirements and statistical purposes. As the costs of hardware and network communications will come down in the coming years, decentralised data entry and data transmission at the Registration level should be the goal to be achieved within a few years. Sustained efforts should be made for adoption of IT in modernising the CRS. The computers provided by the Department of Family Welfare, Government of India may be utilised for this purpose as well.

Labour and Employment Statistics

(Para 9.4.34)

57. The inspectors of the Labour Department and Factory Inspectorate, during their routine inspections of the units, should also check the status of submission of returns. The provisions of various Labour Acts should be vigorously implemented and enforced for defaulting units. Further, if required, legal provisions should be strengthened and penalties made more stringent to act as a deterrent. The renewal of licence of the units should be subject to satisfactory submission of returns in the past.
58. A system of regular meeting of the officials from Government Labour Departments with representatives from business/manufacturers associations should be established. The associations would be instrumental in persuading their member units to submit the returns prescribed under various statutory and other provisions in time. The units submitting the returns should be duly acknowledged.
59. To make the units aware of their obligation to furnish the returns correctly and in a time, periodical notices should be issued in the leading newspapers by the concerned authorities.
60. The Ministry of Labour should undertake immediate measures to rationalise and simplify returns prescribed under various Acts. Combined returns that cater to the requirements of more than one Act should be designed, to the extent possible, in order to reduce the burden of units/establishments. In a liberalised economic environment, this will be a step forward and will find great favour in the industry. To achieve this, if required, necessary amendments should be brought out in the various Labour Acts. Government of India has set up a Labour Commission and the Ministry of Labour should take up this issue with the Commission.
61. The Labour Bureau should strengthen its on-going programme for training of staff in collection, compilation and analysis of data received from the State Governments, as well as from the agencies preparing and submitting the returns. The States should also start such training programmes for the staff of units/establishments supplying information/returns to them.

62. To overcome the problem of non-response from the primary units, a tightening of the administrative machinery is the only solution. However, in respect of those Acts where the degree of non-response is not very high, the Labour Bureau should conduct sample surveys regularly to work out estimates for non-responding units. In cases of very high non-response such as Payment of Wages Act, Minimum Wages Act, Trade Union Act, Motor Transport Workers Act, etc. certain studies on the degree of non-response should be conducted to understand the magnitude of the problem.
63. For the sake of uniformity in the collection and dissemination of Labour Statistics, it is necessary that the variety of definitions for a single concept be avoided. This issue should also be taken up with the Labour Commission so that the inconsistencies of various definitions used in different Acts could be removed. The Ministry of Labour should take up the necessary steps in this direction.
64. In order to meet the requirements of various International Labour Organisation (ILO) Conventions, the Labour Bureau should formulate an action plan especially for ILO Convention Number 160, covering Labour Statistics.
65. There is a need to computerise the working of all organisations engaged in the generation of Labour and Employment Statistics at the Central and State levels. A Labour Information Network integrating all such organisations should be established within the Ministry of Labour for maintenance, coordination and data dissemination.
66. The statistical system in the Labour Departments in the States should be strengthened from district level onwards. At the Centre, there is a need for strengthening or establishing statistical units in various divisions/directorates like Child Labour, Directorate General of Factory Advice Services & Labour Institute (DGFASLI), Directorate General of Employment and Training (DGE&T), etc. of the Ministry of Labour. Further, in the Labour Bureau, there is a need for re-structuring of posts between economic and statistical professionals keeping in view the job functions and to meet the growing demand for Labour Statistics. As most of the functions of the Labour Bureau are statistical in nature, the organisation should be headed by a qualified statistician, as was in the past.
67. The role of Employment Exchange as a placement agency and as a source of labour market information has diluted over the years and needs to be re-established by integrating the labour market information available with private placement agencies along with the Employment Exchanges and making them furnish information on placements, type of jobs, extent of demand, qualifications, industry, etc. A Committee should examine the role of the Employment Exchanges as the source of labour market information and career counselling and how it can work in partnership with private placement agencies.
68. There are serious shortcomings in the Live Register data of the Employment Exchanges as an indicator of unemployment in the country due to inadequate coverage problems. Therefore, for the purpose of drawing valid conclusions on levels of unemployment, etc. the data on the Live Register of Employment Exchanges should be adjusted and updated annually with the help of ratios/multipliers made available by the labour force survey of the NSSO.
69. Though the DGE&T makes attempts at collection and analyses of data on the state of the labour market from the information supplied by the Employment Exchanges, the infrastructure available with the Employment Exchanges is inadequate to compile and forward the necessary data to the DGE&T in time. Therefore, it is recommended that, a comprehensive programme of computerisation and networking of all Employment Exchanges in the country, development of required software and appropriate training programmes should be taken up.

70. The exclusion of certain non-market economic activities, from the definition of work adopted in Population Census could be the reason for the low female participation rates derived from the Census 1991 compared to the rates obtained from National Sample Survey Organisation's (NSSO's) 50th Round. In order to cross check the data from the two sources, it is recommended that the census should adopt the same definition as that of NSSO. This is important to overcome the criticism of under-count in the census data of women workers, which becomes a serious limitation of its utility as a source of economic data. In the Census, 2001, the definition of economic activity adopted has been expanded and modified to reconcile this position.
71. The current practice of tabulation of Census data by the regional offices should continue. However, in order to make available the State level data to the users early, the practice of withholding the release of tabulated data of the region till the All-India tables are released should be done away with. Further, the latest advances in the technology for data processing, analyses and printing should be utilized so that the delays can be brought down and dissemination of data is improved.
72. More probing questions from the informants on subsidiary work in NSSO's quinquennial survey would enable the capturing of information on part-time and intermittent work, which is likely to become very common in the near future.
73. The NSSO should provide standard error of estimates of employment related variables so that the differences in the estimates projected by annual and quinquennial rounds are explained.
74. The NSSO classifies an individual who worked for an hour on any day of the reference week as worker by weekly status. To study the intensity of unemployment (or employment) during the reference week, NSSO should publish data on distribution of persons by, number of days at work and total intensity of work during the reference week.
75. Efforts should be made to compile data on migration of skilled manpower to foreign countries, to capture information on the skills of the emigrant and on the nature of work to which the emigrant is moving out at the place of destination. A system of collecting annual information from the placement agencies for overseas employment should be established to capture this information.
76. The data management system on social security should be computerised so as to ensure better management of Employees State Insurance (ESI), Employees Provident Fund (EPF) and other social security Acts.
77. Child labour poses a complicated and a multi-dimensional problem. The time disposition study of young people along with a classification of their activities into economic and non-economic types can give an insight into the dimension of this problem. For this purpose, a methodological study or survey should be conducted to evolve methods for capturing the problems of child labour.
78. Considering the inherent problems in data collection for bonded labour, as suggested by the L.K. Deshpande Study Group, household surveys should be conducted to ascertain socio-economic circumstances like debt, caste, etc. which lead to the practice of bondage in the areas and activities where there is a tendency to employ bonded labour. The Ministry of Labour should commission such studies in areas and activities prone to bondage.
79. There is a considerable time lag in the publication on Labour Statistics brought out by various agencies. Efforts should be made by all the concerned agencies to take steps that are necessary to reduce the time lag at all stages of work so that published data are available to the users with a minimum time lag.

Education Statistics

Quality, Reliability and Time lag in Educational Statistics

(Para 9.5.14)

80. The institutional records such as registers of admission, attendance, stock, and teacher's registers, etc. should be maintained properly by all institutions. State Departments of Education should facilitate maintenance of records by supplying suitable registers and guidelines to schools. During school inspection, inspectors and officers of the State Department of Education should check the records to ensure that these are up-to-date and are maintained as per guidelines. Suitable manuals should be provided to the concerned teachers and staff for this purpose while some training programmes should also be organised for them at the State and district levels.
81. Scrutiny and verification of all filled-in-forms should be done meticulously at the block level. Errors and omissions should be checked at the block level itself for primary/elementary schools and at the district level for secondary and post-secondary institutions. In order to ensure accuracy of data, verification should be undertaken by the concerned authorities while undertaking inspections. This should not only include scrutiny and verification of records but an on-the-spot assessment of actual situation that exists in respect of enrolment, attendance, teachers in position and facilities that exist in schools.
82. Computerisation of education data at all levels is needed to tackle the problems of quality, consistency, reliability and time lag in data transfer and data retrieval. Use of Information Technology and Internet facilities should be made for data transmission from district to the State and from State to National level. Computerisation will not only reduce the time lag, but in due course of time, it should also do away with the system of supplying State level compiled statistics on cumbersome forms such as Educational Statistics – I (ES-I), Educational Statistics – II (ES-II), etc. A computerised Educational Management Information System should be developed right from the district level to the State and National levels. The Educational Management Information System (EMIS) that has been developed for District Primary Education Project (DPEP) districts should be expanded and implemented in all the districts of the country for collection, processing and dissemination of all educational statistics upto the higher secondary stage.
83. Efforts should be made to provide accurate data on the number of institutions, teachers and students (by sex, grade, SC/ST, rural/urban, etc.) for each level and type of education within a year in the publication, Selected Educational Statistics, which is a very widely used source of Educational Statistics. Other detailed statistics should be included in subsequent publications, which should be produced within 2 years, and not with a time lag of 5 to 6 years as at present. The main results of large-scale surveys that provide educational data, such as those conducted by National Council of Educational Research and Training (NCERT) and NSSO should be available in published form within a year of the date of reference with the detailed results being made available within 2 years. A detailed timetable should be prepared and all data collection and compilation activities at every level should be monitored to ensure strict adherence to the timetable.
84. The administrators in charge of education and human resource development should pay sufficient attention and give priority to the tasks of data collection and compilation. Some incentives and recognition should be given for supplying accurate information on time. Also punitive measures may be taken in the case of inordinate delays and carelessness in filling forms, for example, release of funds to schools could be made dependent on the receipt of statistical returns on time.

85. The present sets of Educational Statistics (ES) forms in which data are being supplied by the States to the Ministry of Human Resource Development are unwieldy and need to be rationalised. These forms would, however, no longer be needed when the computerised system become operational.
86. For collecting and compiling all Educational Statistics, the International Standard Classification of Education (ISCED 1997) developed by United Nations Educational and Scientific Organisation (UNESCO) should be used to ensure standardisation and comparability of data across the States and internationally.

Non-availability of Data on Some Important Items

(Para 9.5.16)

87. The forms for collecting data annually from schools should be reviewed and new items on which data are needed annually, but not collected at present, should be included. Data on a minimum set of items should be collected by all the States, while the States should be free to add items that they consider important specifically for the State.
88. Data on the age of students, teachers' qualifications and experience, income and expenditure of private schools, incentive schemes, educational facilities and equipment, children with disabilities, etc. should be collected in the All India Educational (AIE) Surveys on school education to be conducted by NCERT. The data on age and some other items should be collected on a sample basis in these surveys.
89. All India Educational Surveys on school education should be conducted regularly at intervals of five years and the results of the survey should be published within two years of the date of reference. Data on some of the items should be collected only on a sample basis, as was done in the Sixth All India Educational Survey of 1993.
90. All schools should be given a permanent code number, which should be used both in AIE surveys of NCERT and in the annual data collection programme of the Ministry of Human Resource Development (MHRD) from schools.
91. Data on new categories of schools and teachers such as different type of alternative schools or schools under the Education Guarantee Scheme (EGS) and teachers categorised as para-teachers (known as *shikshakarmi*, *guruji*, *shikshamitra*, etc.) should be collected annually and information on them should be provided separately in statistical reports.
92. The data on income and expenditure of institutions managed by the Government or local bodies should be collected annually from the offices that maintain the record of disbursement of grants and payment of teacher salaries.
93. Certain periodical studies should be conducted by institutions such as NCERT, National Institute for Educational Planning and Administration (NIEPA), Institute of Applied Manpower Research (IAMR) and University Grants Commission (UGC) on the expenditure incurred by educational institutions by level and type of educational programme to estimate the unit cost for each level and type of education.
94. Collection of data on beneficiaries, cost and effectiveness of various incentive schemes should be collected in All India Educational Surveys (AIES) and through special studies.
95. While data on educational facilities becomes available through All India Educational Surveys, data on the present condition and extent of such facilities should also be collected periodically at least on a sample basis.
96. The data on economic aspects such as finances of educational institutions and some other aspects such as average attendance of enrolled students, should be collected on a regular basis in one or more of the following ways, through:

- (a) All India Educational Surveys conducted by NCERT once in five years;
 - (b) Sample surveys of institutions to be conducted by NCERT or the proposed Educational Statistics Bureau of MHRD on a regular basis once in 3 years or through *ad hoc* sample surveys, if necessary, at the National or State level.
97. Data on literacy, educational level of population, expenditure on education incurred by parents, socio-economic background of students, children attending or not attending school, dropouts, etc. should be collected, apart from the Population Census, through household surveys conducted by NSSO. As these items are normally covered under 'social consumption' it is suggested that the rounds of NSS that cover social consumption should be conducted regularly every five years.
 98. The unrecognised schools and institutions should be covered in sample surveys to be conducted by MHRD and in AIE surveys of NCERT. Effort should be made to provide data at least on the number of such institutions, enrolment and number of teachers. To begin with, the local authorities (e.g. Block Education Officers at the block level) should enumerate all private unrecognised schools and keep a record of the same and update them every year.
 99. The secondary and post-secondary level unrecognised institutions (such as those offering courses in computer applications, management, etc) should be covered through periodical sample surveys. To begin with, a comprehensive survey should be undertaken to enumerate them and a system of updating their statistics annually should be evolved. Eventually, All India Council for Technical Education (AICTE) should be entrusted with the task of collecting and maintaining their statistics.

Data Collection in Higher and Technical Education

(Para 9.5.21)

100. University Grants Commission (UGC) should shoulder the main responsibility of collecting and publishing data pertaining all types of institutions of higher education. It should use its regional centres and universities for collection and transmission of data of colleges and other institutions under their jurisdiction instead of collecting data from colleges directly. Universities should collect and compile data from their affiliated colleges and should use computers and Internet/e-mail for processing and transmission of data to UGC for which they should have adequate statistical and computer personnel. UGC should reduce the number of data collection forms and also simplify the existing forms. UGC should also organise quinquennial surveys of Higher-Education Institutions on the pattern of All India Educational Surveys of school education conducted by NCERT.
101. Since MHRD requires some basic statistics on technical and higher education for dissemination through its annual statistical publications, it should continue to collect the same from the States to avoid delay. However, a common institutional form should be devised for collection of basic data (on enrolment, graduates, facilities, teachers, etc.) and the data on this form with the same date of reference should be sent to the concerned Government Department in the State and also to the affiliating university or UGC's regional centre for compilation and transmission to UGC. This should help in eliminating the difference if any, between the two sets of statistics, one produced by MHRD and the other by UGC at the national level. UGC should use other forms for collecting data on additional items that may be needed for other purposes.
102. AICTE should have a full-fledged Statistical Unit to collect and compile data on enrolment, intake, teaching staff, graduates, educational facilities, finances, etc. from all types of technical and vocational education institutions, through its regional offices. So far as the minimum data needs of the State Governments and MHRD are

- concerned, a procedure similar to that suggested above for institutions of higher education should be adopted to reduce the time lag in compilation of Educational Statistics at the National level by MHRD.
103. The above arrangement of data collection should also apply in respect of institutions offering courses in Ayurvedic, Siddha, Unani, and Homeopathic systems of medicine, for which the Department of ISM&H is responsible.
 104. The limited data on education in Medical and Dental colleges, presently collected by Medical Council of India (MCI) and Dental Council of India (DCI) is not sufficient and additional items of information on enrolment, teaching staff, etc. should also be collected by the Central Bureau of Health Intelligence (CBHI) through MCI and DCI or directly from the institutions.
 105. The Department of Agricultural Research and Education (DARE) should collect and publish the data on Agricultural Education on an annual basis and develop the necessary infrastructure for the purpose.
 106. The NCTE should expand its data collection programme to include data on enrolment, teachers, finance, etc. Suitable formats should be developed by it in consultation with MHRD and UGC. Also National Council of Teacher Education (NCTE) should bring out a statistical publication on teacher education institutions annually.
 107. All the above agencies should strengthen or establish Statistical Units to take up the responsibilities of collection and compilation of data on various programmes of technical and higher education. They should also supply data to the MHRD regularly as required by it and bring out their own statistical publications annually without much time lag.
 108. A Coordination Committee on Technical and Higher Education comprising representatives of MHRD, UGC, AICTE, CBHI, DARE, NCTE, etc. should be set up under the aegis of MHRD to devise measures for avoiding duplication of data collection on similar items by different agencies and devising measures to improve the quality and coverage of statistics on all types of technical and higher education.

Weak Infrastructure at Centre, State and District Levels

(Para 9.5.27)

109. In order to ensure that statistical activities get due attention, there should be a full-fledged Educational Statistics Bureau in the Ministry of Human Resource Development. It should be headed by a Statistical Adviser from Indian Statistical Service, in the rank of Joint Secretary to take care of all statistical activities of the two Departments namely, Department of Secondary and Higher Education and Department of Elementary Education and Literacy. The Educational Statistics Bureau should have two Units, each headed by a Statistical officer in the rank of Director/Joint Director to handle the work of these two Departments. The Statistical Adviser will advise the two Departments in all matters related to the collection of Educational Statistics, will coordinate with the National Statistical Office, organise sample surveys on education and liaise and coordinate with international agencies and agencies of the Central and State Governments responsible for generating and supplying educational statistics.
110. Apart from providing basic statistics on enrolment, number of teachers, etc. through periodical publications, the Bureau should bring out various indicators derived from the data and make them available to users. It should also undertake special studies based on time series data from time to time and also make educational projections on a regular basis.
111. It should be possible to bring about the above changes without creating new posts (except that of Statistical Adviser) by suitably upgrading the existing posts and by

- reallocation of work among the existing staff and with provision of suitable training for handling the new type of work.
112. At the State level, the Educational Statistics Unit should be preferably located in one of the Directorates instead of there being several small units for statistical work in every Directorate. A statistician in the rank of Joint Director should head this Unit. The unit should be provided adequate manpower and computer resources to handle data collection and processing of State level data.
 113. The concerned Directorate should be the nodal agency in the State to coordinate all the work related to Educational Statistics with other Departments, which perform educational functions such as Technical Education and Education in Medicine, Agriculture, Animal Husbandry, etc.
 114. The State Educational Statistics Unit should also undertake sample surveys and *ad hoc* studies in the field of education on topics of interest to them. It should also be responsible for conducting training programmes for the staff engaged in statistical work at various levels.
 115. The district level establishment should be well equipped to cater to data collection and processing needs for education upto the higher secondary level in the district and to undertake scrutiny and verification of forms received from the block level. It should however, be ensured that the main statistical work does not suffer because of the staff meant for educational statistics being used for other activities.
 116. The Educational Statistical Bureau at the Centre and the Educational Statistics Units in the States and districts should be equipped with adequate computer hardware and software for data entry, scrutiny, verification and data analysis. Sufficient resources should be provided by both the Central and State Governments to implement computerisation uniformly for the educational statistical system. Some facilities and staff already provided in DPEP States and districts for EMIS should be upgraded for handling the statistics of all institutions up to secondary level and the same should be extended to non-DPEP States and districts also.
 117. The Statistical Bureau at the Centre should network with the States and the districts for receiving data directly from the districts, as well as consolidated State level data from the State Departments of Education.
 118. The staff handling statistical work at the Centre and States should be provided with adequate training in statistics and use of computers for statistical work. Their skills should also be upgraded through proper training. The proposed Bureau in the Ministry of Human Resource Development should organise refresher and other training programmes periodically for the staff to upgrade their knowledge and skills.

Gender Statistics

(Para 9.6.13)

119. The Department of Women and Child Development and CSO have already issued guidelines for collecting all data with a male-female break-up, wherever applicable. In order to ensure that relevant Gender Statistics are collected as per the guidelines, necessary instructions for compliance should be issued again at the highest level. All the censuses, large-scale sample surveys and Administrative Statistics, should have a provision for collecting data with sex break-up, where applicable.
120. As several ministries and organisations are involved in the development of Gender Statistics, a high-level Standing Advisory Committee under the Chairmanship of Secretary, Department of Women and Child Development, with representation from all the concerned ministries including Central Statistical Organisation should be constituted for ensuring proper reporting of Gender Statistics.
121. The Department of Women and Child Development, which is the nodal Department for various developmental planning for women, does not have a Statistics Division.

Therefore, a Statistics Division headed by a senior statistical officer at the level of Joint Secretary, should be created. For better co-ordination with other ministries and departments including the National Statistical Office, the post should be manned by an Indian Statistical Service officer.

122. Indicators of gender disparity such as equity index should be computed at State level for every State taking into account the data available on socio-economic variables. CSO should develop appropriate methodology for computing Human Development Index (HDI) and Gender Development Index (GDI) at State level. Studies should be conducted using gender related data to highlight existing gender disparities.

Environment Statistics

Development of Environment Statistics and Indicators

(Para 9.7.6)

123. CSO should continue to coordinate and collate the relevant information on environment as is being done at present and bring out the Compendium on Environment Statistics on an annual basis. CSO should also provide necessary guidance to the States for development of Environment Statistics and indicators.
124. The database on Environment Statistics should be strengthened and it should be linked with the Environmental Information System (ENVIS) already functioning in the Ministry of Environment and Forests.
125. CSO in collaboration with the Ministry of Environment and Forests and other agencies should finalise the list of Environmental indicators needed for the country and should take the steps to be taken for regular collection of relevant information.
126. Considering the emerging need for Environment Statistics, a Statistical Division in the Ministry of Environment and Forests should be established to cater to the requirements of environment and forest related data and analysis of the same. A Statistical Adviser at an appropriate level from Indian Statistical Service should head the Division.
127. Environment Statistics Cells should be created in the Directorate of Economics and Statistics in all the States and the same should be responsible for co-ordination and collation of information from other related agencies in the State.

Natural Resource Accounting

(Para 9.7.10)

128. The development and implementation of satellite accounts on environment accounting, as suggested by the System of National Accounts, 1993, should be pursued systematically. To begin with, a framework for environmental accounting needs to be developed in India. The framework should be based on System of Integrated Environmental and Economic Accounting (SEEA) as this would avoid the drawback of non-compatibility with national accounts concepts and procedures.
129. Once the framework for environmental accounting is established, the aim should be to improve the data contents and analysis of particular sectors of the framework and develop suitable methodologies for systematic valuation of environmental resources in the country and for estimating the cost of pollution abatement and environmental degradation caused by various economic activities.
130. As Natural Resource Accounting requires the integration of data from different subject areas efforts should be made to involve experts from all relevant disciplines along with the experts from CSO. This office should play a more active and dominant role in the entire exercise.
131. The pilot project on Natural Resource Accounting in Goa initiated by the Ministry of Statistics and Programme Implementation (MoS&PI) should be replicated in 2 or 3

major States for developing a suitable methodology before extending it at the all-India level for developing integrated environment and economic accounts.

Consumption Surveys and Levels of Living

Issues of Concern

(Paras 9.8.21 to 9.8.28)

132. The results of the on-going Pilot Survey on Reference Periods launched by NSSO need be utilised to choose the appropriate reference period for collecting data on food, pan, tobacco and intoxicants in future NSS enquiries on consumer expenditure. Further work need to be done to choose the appropriate reference period for non-food items like durables, education, medical care, etc. Pilot studies may be made to collect panel data for understanding changes over time. Revisit to the same sample of households for data collection after the lapse of few years could also be explored.
133. Any change in the methodology of NSS household expenditure enquiries runs the risk of loss of comparability with the past, but the present situation may require changes. Keeping this in view, the NSS questionnaires for consumer expenditure should be shortened in such a way that it should not take more than 1-1½ hours of interview time, especially in urban areas.
134. In order to reduce the non-sampling errors in canvassing a lengthy schedule, the NSS should make efforts to reduce the length of the of consumer expenditure schedule by analysing the past data. Further, in doing so, the possibility of dividing the full sample of households into two matched half-samples and the use of one schedule with detailed food items but abridged non-food items in one half-sample, and of another schedule with abridged food items but detailed non-food items in the other half-sample should also be explored.
135. The State sample data should be processed regularly within a reasonable time after completion of fieldwork and attempts should be made to obtain and utilise pooled estimates by combining Central and State samples. Efforts need also be made to generate separate estimates for the different NSS regions for all the rounds, especially the quinquennial rounds.
136. Techniques of small area estimation may be adopted to extract maximum amount of information from the collected data, keeping the goal of district level estimates in view.
137. For monitoring of changes in the levels of living, dissemination of consumption data through regular NSS Reports may be done as expeditiously as possible. These Reports may include estimates of per capita physical consumption of a few items besides cereals, like pulses and products, liquid milk, sugar and gur, etc.
138. Poverty measurement and poverty analysis has come to occupy a central place in policy-making in the country. NSSO should provide relevant information expeditiously to Government agencies like the Planning Commission and also to interested researchers for undertaking poverty-related studies. Further, the NSSO may take up special tabulations/exercises periodically to facilitate studies like calculations of calorie intake by households in different segments of the population, especially by those below the poverty line.
139. To facilitate the building of models explaining the poverty status of individual households, the NSS questionnaire should also record relevant characteristics of sample villages and blocks. In the past, such characteristics were not always recorded or made available.

FINANCIAL AND EXTERNAL SECTOR STATISTICS

Monetary and Financial Statistics

Monetary Statistics

(Para 10.2.11)

1. Reserve Bank of India (RBI) should consider publication of an average holding of cash reserves by commercial banks during the reference period. Data on actual cash reserves and liquidity amounts, excess cash reserves and liquidity investments, corresponding net demand and time liabilities (DTL) amounts, and the ratios of required, actual and excess cash reserve ratio (CRR) and statutory liquidity ratio (SLR) should be published. This is because a major component of the reserve money is the bankers' deposits with RBI, essentially arising out of CRR prescribed for the banks. The banks are, however, allowed the flexibility to maintain CRR on an average basis during a fortnight with the restriction that the CRR on a particular day could be maintained at as low as 50 per cent of the required level for the first seven days of the reporting fortnight and 65 per cent for the rest of the fortnight. The reserve money data at a particular point of time, therefore, may not reflect the sharp changes in the component of bankers' deposits with RBI.
2. Since there are differing perceptions on the concepts of monetary aggregates, RBI should publish a time series on components of money at a disaggregated level so as to enable analysts to construct their own series.
3. The data on the new monetary aggregates are available on a monthly basis since April 1993. RBI should consider extending this series backwards with a view to providing a longer time series, which would facilitate empirical studies.

Banking Statistics

(Para 10.2.21)

4. Data on residual maturity of term deposits with the commercial banks should be collected and published by RBI. This will help in understanding the maturity profile of liabilities of commercial banks, its transition over time and the causal factors determining such changes.
5. The data on inter-bank cheque clearances should be given separately by the RBI.
6. In view of the need for consistency in the National Statistical System, RBI should maintain uniformity in the classification of occupation in borrowal accounts in Basic Statistical Returns (BSR) in conformity with National Industrial Classification (NIC) 1998 of CSO.
7. The coverage of data under the BSR system presently collected on electronic media (floppy) from the public sector banks (PSBs) should be extended. The PSBs should be encouraged to report data to RBI on-line, which would further reduce the time lag in processing and disseminating statistics based on the BSR system. The estimates based on sample surveys under the BSR, should include information on their statistical credibility such as standard errors.
8. Locational Banking Statistics (LBS) and Consolidated Banking Statistics (CBS) on international claims of banks should be compiled and published by RBI as early as possible.

Regional Rural Banks

(Para 10.2.26)

9. The delay in collection of data from the Regional Rural Banks (RRBs) should be eliminated by concerted efforts made by RBI, NABARD and RRBs.

Co-operative Banks

(Para 10.2.32)

10. The NABARD should consider different methods of collecting data to reduce the time lag. The basic strategy should be to differentiate among higher tiers as well as to differentiate larger co-operatives from the large number of smaller ones. Data from the former should be prompt and regular while for the latter a suitable system should be designed. The differentiation between the scheduled and non-scheduled co-operatives can also be useful for quick data collection and dissemination.
11. The NABARD should adopt a suitable sample survey to collect data from primary rural co-operative societies, (which are large in number) as it becomes difficult to collect data from all such co-operatives at frequent intervals.
12. The balance sheet of the co-operative banks should be standardized to a form, similar to that of commercial banks by RBI and NABARD.

Financial Institutions

(Para 10.2.38)

13. Term-lending (IDBI, SIDBI, IFCI, etc.) and refinance institutions (NABARD, NHB) should furnish data promptly on a monthly/quarterly basis. To facilitate prompt release of data, a revision of the existing returns should be undertaken and an increased frequency in reporting stipulated by RBI and IDBI concertedly on an urgent basis.
14. The accounting years should be synchronised for all financial institutions.
15. The RBI, in consultation with IDBI, should introduce necessary returns from Financial Institutions (FIs) for compilation of liquidity and other financial aggregates.

Non-Banking Financial Companies (NBFCs)

(Para 10.2.51)

16. The RBI should undertake the task of institutionalising the reporting system of all the NBFCs on an urgent basis. Accordingly, an appropriate reporting system should be devised for different categories of NBFCs. With regard to companies, which are, both registered and regulated by RBI namely, deposit-taking companies, periodical returns should be collected, consolidated and data disseminated on a systematic basis. The data coverage and timeliness for large companies should be on par with banking companies. There are NBFCs, which are registered with the RBI but are not regulated since they do not accept deposits. Information in respect of these companies should be consolidated and disseminated. There are several other companies which are registered under the Department of Company Affairs (DCA) and do not come under the jurisdiction of RBI and with respect to such companies, the information should be classified, consolidated and disseminated on the basis of their Annual Reports.
17. RBI has been collecting certain information through their surveys on growth of deposits with non-banking companies (now replaced with system of returns in case of deposit-accepting companies), which covers comprehensively different aspect of their operations. The RBI should analyse the complete set of data collected through these returns and publish comprehensive data on asset and liabilities, income and expenditure of all reporting companies, besides the analysis of public deposits as is being published at present. The details should also be presented by type of financial companies in collaboration with DCA.
18. A one-time census of NBFCs covering all companies incorporated with DCA should be conducted. The census should collect data on important activities, especially assets and liabilities and income and expenditure. A periodic sample survey should be conducted by the RBI for updating population estimates for NBFCs.

19. The RBI should continue the studies on financial and investment companies, till the system suggested above gets stabilised.

Informal Financial Sector Statistics

(Para 10.3.13)

20. The National Sample Survey Organisation (NSSO) should continue to conduct the All-India Debt and Investment Surveys (AIDIS) at decennial intervals. The coverage of the AIDIS needs to be improved by pooling the estimates of Central and State samples on the one hand and by increasing the sample size on the other. It is necessary that the RBI and the NSSO should have a close collaboration in the conduct of AIDIS.
21. The Central Statistical Organisation (CSO) should conduct Enterprise Surveys separately for financial service enterprises and provide data needed to derive value-added details as also the details of credit. The RBI should closely liaise with CSO and NSSO on the technical aspects of these surveys and ensure the coverage of all known household financial enterprises like, share brokers, multani shroffs, chettiers, marwari kayas and pawnbrokers and various kinds of moneylenders.
22. The details collected under various returns of RBI, in particular Basic Statistical Return-1 (BSR-1) and Basic Statistical Return-4 (BSR-4), should be tabulated against the informal financial sector to understand the extent of linkages between the formal and informal segments.
23. Financial data in respect of all Non-Governmental Organisations (NGOs) and Self-Help Groups (SHGs) involved in micro financing should be collected. It is suggested that a sample survey of NGOs and SHGs should be undertaken by NABARD at quinquennial intervals. NABARD should also prescribe a half-yearly return to be submitted by all NGOs and SHGs.
24. Apart from nation-wide surveys, which provide macro estimates, it is necessary to promote regional and micro-level studies on the informal financial sector activities considering the diversity across the regions.

Insurance Statistics

(Para 10.4.17)

25. Information pertaining to the insurance sector should be collected and disseminated by Insurance Regulatory Development Authority (IRDA). Income, expenditure, assets, liability, sources and uses of funds, investments, term structure, non-resident operations of insurance companies, etc. should be the major items of information. IRDA should establish a Research and Statistical Division for this purpose, rationalise existing returns and introduce new returns to collect necessary data.
26. The data should be consolidated by different categories of insurance, e.g. life, non-life, reinsurance, pension and super-annuation, health, crop, others.
27. In respect of Postal, Employees State Insurance, Army and other group insurance schemes, pension and super-annuation, essential information should be collected by IRDA and published.
28. Break-up of data by State, sector (rural-urban), ownership of insurance business, gender and occupation classification of policy holders, etc. should be published.

Capital Markets

Primary Market

(Para 10.5.5)

29. The Securities and Exchange Board of India (SEBI) should disseminate statistics on:
 - (a) Resource mobilisation in the primary market by various categories of entities (non-Government Public Limited Companies, Banks, Financial Institutions (FIs), Government Companies (PSUs) and various categories of investors (ownership

- pattern of capital raised), (b) Data on firm allotments to institutional and other investors, (c) public subscriptions, (d) bond issues divided as between public issues and private placements, (e) actual mobilisation of funds through bonds, (f) Data on underwriting, and (g) Cost of issues.
30. The SEBI should undertake a comprehensive survey (as was done by the RBI in the past) on public response to equity capital issues – size-wise, occupation group-wise, region-wise.

Private Placements

(Para 10.5.10)

31. The Securities and Exchange Board of India (SEBI), being a regulatory authority, should collect, compile and disseminate data on equity and debt on private placement, as a significant part of private placements are being listed on the stock exchange through subsequent processes. The system of data collection should be urgently formalised by SEBI along with disclosure norms for the private placement market. Pending such formal regulation through further amendments to the Companies Act, SEBI should stipulate certain listing requirements.
32. The banks, Financial Institutions (FIs) and NBFCs investing in privately-placed issues should periodically furnish details to RBI, such as amount invested, maturity period and credit rating of the instruments, rate of interest, etc. This would help in widening the coverage of data available with RBI for the purpose of processing and maintaining continuity in disseminating data on private placement.

Secondary Market

(Para 10.5.22)

33. The Securities and Exchange Board of India (SEBI) should provide estimate of an all-India market capitalisation at regular intervals.
34. SEBI should construct divergence indices for the two main stock exchanges in the country, Bombay Stock Exchange (BSE) and National Stock Exchange (NSE), to bring out the extent of arbitrage opportunities that exist after taking into account the cost differences in operating in the two exchanges.
35. Trades and Quotes (TAQ) data set should become available for all exchange-traded products, such as shares, bonds and derivatives. SEBI should ensure that a standardised data set is obtained and disseminated by each exchange every day.
36. The reporting of trade data on bonds should be made mandatory by the RBI for Government securities and by SEBI for corporate bonds and that such reporting should take place within the stipulated period. The NSE should ensure time-stamp of the data.

Mutual Funds

(Para 10.5.25)

37. The Securities and Exchange Board of India (SEBI) should consider widening the coverage of mutual funds operations to include: (a) Resource mobilisation by individual mutual funds, (b) Deployment of funds by mutual funds, (c) Resource mobilisation by offshore mutual funds, (d) Resource mobilisation by type of schemes (i.e., open-ended or close-ended) and by objective of scheme (i.e., income, growth, balanced, tax-saving), (e) Net resource mobilisation by Mutual Funds during the month, (f) Ownership of the units of Mutual Funds, and (g) Liabilities and assets, and income and expenditure accounts of the mutual funds.

Capital Market Related Institutions

(Para 10.5.30)

38. SEBI should be the Central agency for collection and dissemination of data from all institutions that are under its control and jurisdiction.

39. SEBI should also bring out consolidated data of share brokers and share-broking firms in the organised sector in respect of their income, expenditure, volume of transactions and sources and uses of funds.
40. RBI should evolve a statistical system for collection of statistics from institutions for electronic funds transfer, payments through credit or debit cards in the market and the total volume of such transactions.

Government Securities Market

(Para 10.6.8)

41. Data on ownership pattern of Central and State Government securities are released on an annual basis for a broad category of investors. However, no data on ownership pattern are disseminated on a quarterly/monthly basis. Therefore, monthly/quarterly data with wider coverage should be made available.
42. The maturity profile of outstanding State Government loans are not released, though such data, for the Central Government are released annually. Therefore, the outstanding market loans of the Central and State Governments separately, scrip-wise, as well as aggregate year-wise, should be released regularly on an annual basis.
43. There are areas where dissemination of market borrowings of State Governments is not at par with that for the Central Government. This gap needs to be bridged. First, data on Central Government market borrowings, budgeted and actuals and gross and net, are released regularly on a weekly, quarterly and annual basis. However, such data are not available for State Governments. Hence, details of market borrowing programmes of State Governments, allocations and actuals, auction and pre-announced coupons should be released regularly, preferably on a quarterly basis. Secondly, data on maturity pattern of the Government of India Rupee loans outstanding at the end of the year classified into different periods with a 5-year interval are released on an annual basis. Data on maturity pattern, on a similar basis, should be extended to include State Government loans. Further, residual maturity by original coupon rates should also be published.
44. The Government-guaranteed bonds are not treated as part of Government securities but as an integral part of the corporate debt. However, in view of the sovereign guarantee extended and the large magnitudes of such securities in the debt market, they deserve to be separately identified as a category, and data collected and disseminated. RBI should take up with the Central and State Governments and the regulator for other securities to mount an information system for this purpose.

Money Market

(Para 10.7.8)

45. Introduction of the negotiated dealing screen (NDS) system should be operationalised urgently by RBI, so as to enable on-line access to data pertaining to all money market instruments. This would help reduce the time lag in release of data on call/notice money market, Commercial Papers (CPs), Certificates of Deposits (CDs) and bills rediscounting market.
46. Pending the introduction of NDS, RBI should improve coverage of daily data on call/notice money market transactions and reduce the time lag in data on Commercial Paper, Certificates of Deposit and the bills rediscounting market. This would be facilitated with the full-scale operationalisation of Very Small Aperture Terminal (VSAT), which would connect all the banks amongst themselves and with RBI and there would be inter-connectivity between branches of banks. Such a system would facilitate treasury management and management information system of banks as also reporting to RBI through electronic media. Hence, with faster

submission of data by banks to RBI, the time lag in dissemination of data to the market would be greatly reduced.

47. While the setting up of a Clearing Corporation is a welcome step, efforts should be made to ensure that the Corporation aids the process of comprehensive, timely and reliable data dissemination in regard to secondary market transactions in both money market instruments and Government securities.

Fiscal Statistics

(Para 10.8.29)

General Budget Data

48. The Expenditure Budget of Central Government provides data on Budget Estimates and the Revised Estimates of Internal and Extra Budgetary Resources (IEBR) of the Central Public Sector Enterprises. The account (actuals) figures on resources raised by these enterprises against the Budget Estimates (BE) and Revised Estimates (RE) are not available. Therefore, the details of actuals of IEBR (including the amount of External Aid) should be published in the Budget.
49. The accounts data on State-wise distribution and devolution of income tax, basic and additional excise duties, etc. are not published in the Receipt Budget of Government of India while the Budget Estimates (BE) and Revised Estimates (RE) are available. The account data on amounts of devolution actually transferred to the States are available elsewhere in the publications of Ministry of Finance and the Planning Commission. Therefore, the accounts data should be provided in the Budget documents for the subsequent years for the purpose of consistency.
50. Tax expenditure, which arise in the context of various exemptions that are extended under various tax laws, are yet to be quantified. Therefore, the details on both tax expenditure and implicit subsidies; tax arrears and tax refunds should be provided in the budgets of the Central and the State Governments.
51. The Combined Finance and Revenue Accounts published by the Comptroller and Auditor General of Accounts (CAG) is the only source where the Fiscal Statistics of both the Centre and individual States are published. At present, there is a considerable time lag in this publication. This publication should be released promptly and regularly.
52. The detailed data of State Finances on a comparable basis is not available in the country. Though the RBI does publish an annual consolidated study, there persists a need to have a detailed and comparable data set for each State – individually and consolidated. There are significant differences in the budgetary practices between different States. There has to be a uniform classification of a proper plan to classify the data on a comparable basis, eliminating inter and intra-Government transfers. The Central Government should therefore ensure that such data are compiled and disseminated on an early basis.
53. No published information is available on various Centrally sponsored schemes. The data on financing pattern of Centrally sponsored schemes in different States and the expenditures incurred in different States from Central funds and States' own contributions should be compiled and disseminated along with the Budget documents.
54. The State Governments do not provide high frequency data on major fiscal indicators on a monthly basis as is the practice followed by the Central Government. Therefore the State Governments should make available to the public the data on major fiscal variables on a monthly basis.
55. To assess the current system of accounts and budgets of local bodies, and to establish uniform budget practices for local bodies on the pattern of Central and

State Governments, a system of consolidation of accounts by the States should be evolved and thereafter followed at national level. At the initial stage, the accounts of bigger local bodies such as those of the metropolitan cities, municipal corporations and municipalities should be taken up completely, while the accounts of smaller bodies may be covered through suitably designed sample surveys. The securities issued by the local bodies should be published in the State Government budgets.

56. The issue of providing guarantees has significant implications for the sustainability of the fiscal position of the Governments – Central and States. Further, some forms of guarantees, like the letters of comfort issued by State Governments to banks and financial institutions, are in nature of implicit guarantees, which are not included in the present estimates of guarantees in India, but are internationally treated as guarantees. Therefore adequate arrangements for reporting and monitoring of guarantees granted by Central and State Governments should be instituted.
57. The draft Manual on Government Finance Statistics 2000 of the International Monetary Fund (IMF) favours revised principle of recording the flows on accrual basis switching over from the current system of cash basis. Accordingly, the Government may consider, in due course, dissemination of Fiscal Statistics on accrual basis as per advice of the Comptroller and Auditor General of India (CAG).

Tax Statistics

58. The details regarding the tax records, revenue as raised, revenue foregone on account of concessions contained in the budget proposals, receipt on tax arrears of the previous years and taxes collected through special schemes are not separately indicated. This data in gross and net terms should be given in the Budget Documents in a more transparent and detailed manner.
59. The data on tax revenue of Central Government should be disseminated promptly and State wise break-up made available.
60. The data published by the Directorate of Income Tax in its All India Income Tax Statistics (AIITS) are based on estimates derived from a small sample size and is therefore rendered unrepresentative. Therefore the sample size and design should be modified to make it more representative and broad-based considering the manifold increase in the number of assesseees. Further, the time lag in the publication should also be reduced.
61. The computerisation and net working of Field offices of the Central Board of Direct Taxes (CBDT) and Central Board of Excise and Customs (CBEC) should be completed on a priority basis for improving the data quality, better management and speedier transmission of data from the field offices to the Directorates at the Centre. To generate a comprehensive database on various aspects of Direct and Indirect Tax Statistics, the CBEC and CBDT should generate profiles of all tax assesseees by implementing complete computerisation of various returns filed by assesseees.
62. The organisational set up for collection of statistics in the field offices of CBDT and CBEC should be strengthened. The Research and Statistics Wing, Directorate of Income Tax should be the nodal agency on all statistical activities and function directly under CBDT. A Research Unit should also be set up in CBDT to undertake research studies on various aspects of tax planning.

Institutional

63. A data warehouse for Fiscal Statistics at the National level within the Department of Economic Affairs (DEA) should be established. Such an institutional mechanism is intended to collect, compile and store the data generated and disseminated by various official agencies which would not only help to build up a comprehensive

database on Indian Fiscal Statistics but also to identify the data gaps at the macro and micro levels.

Balance of Payments

(Para 10.9.20)

64. The implementation of recommendations made in Reports of various committees and groups already constituted to closely examine different aspects of Balance of Payments (BoP) data needs to be expedited with a view to further refining items of the BoP statistics. In fact, there should be a continuous review of the methods of collecting data with regard to BoP on account of the anticipated developments in liberalisation of external sector transactions on both the current and capital accounts. In particular, this would be necessitated by any further review of repatriation and surrender requirements in the current account and liberalisation of the capital account.
65. Steps should be taken to identify and narrow down the differences in merchandise trade data as compiled by the Directorate General of Commercial Intelligence and Statistics (DGCI&S) and those reported on payments basis by RBI.
66. The coverage of Electronic Data Interchange (EDI) system should be enlarged to more ports and different types of shipping bills so as to facilitate a matching of exports data on the basis of Daily Trade Return (DTR) and those on the basis of exports negotiated contract (ENC). This would result not only in the narrowing down of differences in exports data between DGCI&S and RBI but would also facilitate recording of exports data on the basis of ENC statements reflecting change of ownership.
67. The coverage of DGCI&S data on imports should be enhanced to include defence items, aircraft, oilrigs, etc. This would help in narrowing down the differences between DGCI&S and RBI data.
68. The import data should be compiled on free on board (f.o.b.) basis. RBI should examine the possibilities of conducting surveys to collect information on freight and insurance components from DTR data, which in due course would facilitate compilation of imports on f. o. b. basis.
69. The purpose codes prescribed for reporting of foreign exchange transactions by Authorised Dealers (ADs) to RBI should be enlarged to capture more disaggregated data on international trade in services. Further, the mechanism of data reporting by the ADs should be supplemented by surveys on important areas of services.
70. The tourist arrival figures as compiled by the Ministry of Tourism are used by RBI for estimating travel receipts. In order to improve the quality of these estimates, the Ministry of Tourism should conduct surveys on the expenditure pattern of tourists drawn from different broad regions of the world on a regular basis.
71. Although RBI collects data on software exports through Software Exports (SOFTEX) forms, it uses NASSCOM data as a controlling total for gross receipts from software exports. There is, however, a need to re-examine the current methodology on collection of software export data. RBI, therefore, should constitute a technical group consisting of members from RBI, Ministry of Commerce, CSO, NASSCOM and a few major software companies to comprehensively examine the data reporting mechanism for software exports.
72. In a liberalising economy, it becomes increasingly necessary to rely on surveys to plug information gaps. RBI should conduct periodical surveys on dividends and profits arising out of foreign direct investment (FDI) and portfolio investment separately.
73. There is a need for surveys by RBI on disinvestment in India and abroad by non-residents and resident Indians, respectively.

74. The RBI should take necessary steps to capture data on portfolio investment by NRIs in order to improve the coverage of the capital account in the BoP.
75. In order to ensure complete coverage of short-term credit, RBI should institutionalise a mechanism for collection of data on suppliers' credit up to 180 days, which would have an impact on the capital account of the BoP. This information is also required on stock basis to improve the coverage of the external debt statistics.

External Debt and International Investment Position

(Para 10.10.14)

76. As suggested by the Study Group on Short-Term Debt under the aegis of the Monitoring Group on External Debt in the Ministry of Finance in order to capture data relating to suppliers' credit up to 180 days, RBI should modify the existing floppy based R-Return reporting by introducing an additional field on date of shipment. While this information is required for complete coverage of external debt, it would also enhance the coverage of short-term credits in the capital account of the balance of payments (BoP).
77. The RBI should introduce a computerised Comprehensive Single Return for Non-Resident Indian (NRI) Deposits as suggested by the Study Group on NRI Deposits for compilation of external debt data on residual maturity basis.
78. The quarterly external debt data are disseminated with a time lag of 5 to 6 months from the reference period. This time lag should be reduced to 3 months, which would also meet the Special Data Dissemination Standards (SDDS) requirement of timeliness.
79. Steps should be taken by agencies responsible for external debt data [namely, the Controller of Aid, Accounts and Audit, and External Debt Management Unit (EDMU) in the Ministry of Finance and RBI] to provide additional sectoral classification of non-government external debt into banks and other sectors (private and public non-bank enterprises), which would also meet the SDDS requirement of sectorisation.
80. At present, the stock of Foreign Institutional Investors' (FIIs') investment in debt securities is estimated on the basis of accumulation of flows in the absence of direct data on stocks. RBI should take necessary steps to put in place a data collection mechanism for stock data on FIIs' investment in debt securities at market prices in consultation with Securities and Exchange Board of India (SEBI), FIIs and custodial banks.
81. The RBI should re-orient its methodology for compilation of data on International Investment Position (INIP) by making increasing use of flow data wherever the stock data are not readily available with a view to generating quarterly data with a time lag of six months, which would meet the timeliness requirement under SDDS of the IMF.

E-Commerce

(Para 10.12.10)

82. The database on electronic commerce has to be established. Since e-commerce is still at initial stages and has significant cross-border linkages, it is necessary for the Central Statistical Organisation (CSO) to closely align the statistical system with initiatives on World Trade Organisation.
83. It is necessary to conduct surveys covering e-commerce providers for data on income, expenditure, value added, etc.

PRICE STATISTICS

National Consumer Price Index Numbers

(Para 11.2.14)

1. It should be mandatory on Labour Bureau and Central Statistical Organisation (CSO) to revise their series preferably every five years, but not later than ten years. In the case of Consumer Price Index for Agricultural Labourers {CPI (AL)} and Consumer Price Index for Rural Labourers {CPI (RL)}, the base year should be revised five yearly, using the quinquennial NSS Consumer Expenditure Survey data.
2. For revision of the series, the administrative procedure should be streamlined in such a way that necessary resources are sanctioned in a time-bound manner. The exercise on revision of the base year should be completed by the concerned agencies within a one-year period preferably after the availability of the requisite data.
3. The procedure of allocation of weights to different centres covered under Consumer Price Index for Industrial Workers {CPI(IW)} for computation of the all-India CPI(IW) needs further examination by Technical Advisory Committee on Statistics of Prices and Cost of Living Index Number (TAC on SPCL). A similar examination should also be done for Consumer Price Index for Urban Non-Manual Employees {CPI (UNME)} series.
4. Increasing the present sample of 600 villages spread over 20 States selected for price collection under CPI (AL) and CPI(RL) should be examined by TAC on SPCL.
5. As the current CPI series does not provide changes in the prices for the entire rural and urban population since they are designed to measure the changes in the prices of goods and services consumed by specific segments of the population, there is a need to compile the CPI separately for the entire rural and urban populations. TAC on SPCL should give a methodology for compilation of CPI for rural and urban areas separately using quinquennial NSS Consumer Expenditure Survey Data for the preparation of the weighting diagram. TAC should also give a procedure for compiling a combined index based on these two indices. The existing system of price data collection should be suitably streamlined and augmented so as to provide price data for compilation of CPI for rural and urban areas.

State CPI Numbers

(Para 11.3.3)

6. There is a need to bring uniformity of methodology in the computation of price indices compiled by the States and Union Territories (UTs) so that meaningful analysis of regional price variation can be made. TAC on SPCL should suggest measures to ensure uniformity in compilation of CPI numbers by the States and UTs.

National Wholesale Price Index Number

(Para 11.4.6)

7. In order to obtain uniformity in the collection of wholesale price data, the Office of the Economic Adviser should explore the possibility of engaging exclusive staff for a weekly collection of price data. There should be a direct system of data collection to eliminate problems of non-response in the mail method.
8. An Expert Committee should be constituted to go into the quality aspects of Wholesale Price Index (WPI) data. To make the system transparent, the Office of Economic Adviser should make available detailed data to other Government agencies for official use.
9. To capture the recent changes in industrial structure on account of liberalisation and globalisation, there is a need to have periodic revisions of WPI numbers, preferably

- every five years but not later than ten years. The proposed revision should bring base years of WPI and CPI numbers much closer to each other.
10. A separate Services Sector Index should be developed, initially as a complement to the WPI. It should be merged with the WPI, once it has stabilised and established its robustness.
 11. The Working Group on Services Sector Index constituted by TAC on SPCL should suggest institutional mechanism for collection of requisite data for the Services Sector Index and also its periodical updation. The Group should also take into account requirements of the World Trade Organisation's (WTO) categories as also National Accounts.
 12. As the present WPI is an inadequate measure of inflation; there is a need for a separate index for measurement of inflation in the economy. The proposed CPI for the rural and urban areas could be used for this purpose.

State WPI Numbers

(Para 11.5.2)

13. There is a need to bring uniformity in terms of base year, number of items, derivation of weighting diagram, data sources, etc. in the wholesale price indices compiled by the various States and UTs in order to make any meaningful analysis of regional variation in prices of wholesale transactions. All the State WPIs should have preferably the same base year or around that, as that of the all-India. TAC on SPCL should examine all issues including conceptual and technical difficulties in compilation of State WPI numbers.

Existing Price Collection Mechanism

(Para 11.6.3)

14. There is a need to unify the system of price data collection in such a way that the proposed mechanism should take into account the requirements of, at least, all central agencies compiling the price indices. The proposed system should be streamlined and strengthened in such a way that effective participation of both the Central and the State Agencies is ensured. The system would also facilitate the compilation of CPI for rural and urban areas with a substantial saving on the cost of price data collection. For speedier transmission of price data, appropriate tools of information technology should be deployed.
15. As there is no legislation of collection of price data at present, the feasibility of bringing it under the umbrella of Collection of Statistics Act, 1953 should be explored.

CORPORATE SECTOR STATISTICS

Corporate Sector

(Para 12.1.14)

1. A one-time census of all registered companies to create a frame by eliminating closed down and defunct companies should be conducted. This will also facilitate the estimation of population parameters.
2. The Registrars of Companies (ROCs), vested with the responsibility of allotting the Corporate Index Number (CIN), should monitor the submission of Annual Reports rigorously for a proper implementation of the Act and for purposes of annual updation of the frame as well as improvement of the database.
3. In the long run, this process of assigning CINs along with updation in respect of closed down and defunct companies would result in a complete frame. It should be made compulsory through the provisions of the Companies Act to mention the unique code (CIN) in all returns submitted by the companies.

4. Since some attributes, like listing status, ownership, industrial activity and State of registration are likely to change over a period of time, the CIN should take into account the likely changes in these attributes with the passage of time, to maintain the continuity in information at the individual company level.
5. The procedure of de-registration should be simplified by incorporating suitable provisions in the Companies Act.
6. At present, the Department of Company Affairs (DCA) or ROCs are not processing the information contained in the Annual Reports and Balance Sheets. They should be entrusted with the responsibility of processing and dissemination of information in respect of a set of variables for monitoring and policy formulation. To accomplish these tasks, suitable strengthening of the statistical personnel should be provided.
7. The DCA should also ensure that Annual Reports of companies required by Reserve Bank of India (RBI) – whether listed, deemed or private limited – are available to RBI so that further detailed analysis can be conducted. A mechanism for smooth supply of annual reports of all companies, both public limited and private limited, and both listed and non-listed, should be mutually agreed upon by the DCA and RBI.

Standards of Disclosure/Reporting

(Para 12.2.6)

8. The minimum list of variables to be added in the Annual Report or Balance Sheet along with the format of Balance Sheet Abstract (BSA) should be finalised by the Department of Company Affairs (DCA) in consultation with the concerned agencies such as the Reserve Bank of India (RBI), the Securities and Exchange Board of India (SEBI), the Central Statistical Organisation (CSO), etc.
9. A standard format should be formulated for uniform and timely reporting of data and to facilitate electronic processing.

Institutional Arrangement for Non-listed Companies

(Para 12.3.2)

10. Companies having assets or sales over, say, Rs. 50 crores (on the lines of deemed public company in the Companies Act), or having a market share of over 10 per cent in a particular market segment, or those with controlling foreign interest should be brought under some legal obligations to provide for necessary disclosure of annual reports and their accessibility to the public. Such transparency with regard to reporting and disclosure requirements should be adequate, even if not necessarily on par with listed companies.
11. The DCA should have the primary responsibility of bringing out basic statistics in respect of such companies.

NATIONAL ACCOUNTS STATISTICS

Publication of National Accounts Statistics and Press Releases

(Para 13.1.28)

1. The Cabinet Secretariat or a similar high-level authority at the Centre and in the States should impress upon the source agencies to supply the requisite basic data for National Accounts Statistics (NAS) in a timely and reliable fashion by minimising delays and major revisions.
2. The National Accounts Division (NAD) of Central Statistical Organisation (CSO) should explicitly announce the time-table of release of NAS and strictly adhere to it.
3. The NAD of CSO should explicitly provide clarifications for the large differences (magnitude to be specified) from one revision to another for the same year in the

sectoral and aggregate estimates along with the mention of the source agencies concerned.

4. The list of such source agencies causing delay/major revisions be notified to the apex technical agency, National Commission on Statistics, which would be in charge of supervising and monitoring the statistical system, for information, appropriate action and devising institutional correctives.

Overview of the Indian System of National Accounts

(Para 13.2.10)

5. Urgent steps be taken to revive and restore the legitimate role of NAD of the CSO in providing technical leadership, guidance and coordination in the compilation of National and Regional Accounts.
6. Steps be taken to activate the institutionalised interaction between NAD of CSO and State Directorate of Economic and Statistics (DES) through periodical meetings to discuss the weaknesses in data and problems, and difficulties emerging from the foregoing detailed discussion of NAS and chalk out mutually agreed programme for improving the reliability, timeliness and credibility of the Indian System of National Accounts.
7. The meetings be used to impress upon the States to carry out State level annual/benchmark surveys keeping in view the needs of the system of National accounts.
8. Priorities in carrying out the benchmark sample surveys be worked out keeping in view (a) the share of the concerned aggregate/sub-aggregate in the total at the State/National level and (b) urgency of updation in terms of the year, of last survey, used in the estimation.
9. In line with the decentralised character of the Indian Statistical System, the States should develop the necessary survey organising capabilities.

Gross Domestic Product

(Para 13.3.72)

10. Recommendations in chapter 4 to 12 in respect of Official Statistics relating to different sectors of the economy be implemented speedily so as to improve the quality of data going in to the compilation of National Accounts Statistics from primary source agencies.
11. The major weakness lies in estimating the contribution of the large number of unorganised and small self-employed enterprises in manufacturing and services, where the basic problems are those of irregular income streams, multiple activities undertaken during a year, absence of business accounts, and frequent entries and exits of units. While benchmark enterprise surveys currently provide the available database, the characteristic features mentioned above pose formidable challenges of survey design, survey methodology and survey practices. It is therefore recommended that, periodical benchmark surveys of unorganised enterprises be continued while simultaneously conducting pilot studies for improving the technical survey design methods and practices.
12. For updating rates and ratios used in GDP estimation by industry of origin, it is recommended that type studies (see Appendix 13.1 in Volume II) in different parts of the country, to provide reasonably representative estimates at the National level, be conducted regularly with the help of State Directorates of Economics and Statistics.

Private Final Consumption Expenditure

(Para 13.4.9)

13. Existing weak areas in the estimation of PFCE relate to outdated basis for (a) marketable surplus ratios and wastage ratio in agricultural crops, fruit and vegetables

- and meat and meat products, (b) trade and transport margins, and (c) various rates and ratios. It is recommended that periodical and geographically dispersed type studies/case studies be carried out for continual updation.
14. As part of the Study Group on non-Sampling Errors, Central Statistical Organisation (CSO) and National Sample Survey Organisation (NSSO) jointly carried out "Cross-validation Study of Estimates of Private Consumption Expenditure Available from Household Survey and National Accounts" to bring out major sources of differences between PFCE from National Accounts and Consumer Expenditure from National Sample Survey. It is therefore recommended that studies be carried out to correct the item-level weaknesses noted in the Cross-validation Studies in both the sources so that discrepancies in the two estimates would be minimised.
 15. The weakest link in the estimation of Private Final Consumption Expenditure (PFCE) has been the indirect coverage of the Non-profit Institutions Serving Households (NPISHs). It is recommended that periodical surveys/type studies be conducted to collect income and expenditure of NPISHs.
 16. The sampling design of the annual consumer expenditure surveys carried out by National Sample Survey Organisation NSSO be examined with a view to (a) reducing sampling error of the annual estimate and (b) assessing the feasibility of obtaining sub-round-wise estimates for quarterly estimation.

Government Final Consumption Expenditure

(Para 13.5.4)

17. The major data gap in the estimation of Government Final Consumption Expenditure (GFCE) being with respect to local bodies, it is recommended that the State Directorates of Economic and Statistics (DESS) analyse the budgets of the local bodies every year for estimating all the National accounts aggregates including GFCE.

Saving and Capital Formation

(Para 13.6.18)

18. The problems in the estimation of saving and investment of the private corporate sector have been traced to the doubts about the representative character of the sample companies and inadequacies in the blow-up factor. It is recommended that corrective steps contained in the recommendations in Chapter 12 of the report on the Corporate Sector be implemented speedily.
19. The second major weakness in the estimation of saving and investment relates to the indirect residual estimation of savings in the form of physical assets undertaken by household enterprises and own-account un-incorporated enterprises for which decennial all-India debt and investment surveys provide benchmark estimates. It is therefore recommended to (a) examine the feasibility of reintroducing the receipts and disbursement block with last 365 days as a reference period as was the case with the National Sample Survey integrated household schedule from 1964-65 (19th round) to 1970-71 (25th round) in the current annual surveys of household consumer expenditure; and (b) experiment with the survey methodology for improving the estimation of capital formation from the enterprise surveys.
20. Various rates and ratios are used in the estimation of Capital Formation in construction, machinery and equipment and change in stock as also in the estimation of trade and transport margins. It is recommended that necessary type studies (see Appendix 13.2 in Volume II) to update them be carried out in a geographically dispersed fashion.
21. The following observations which appeared in the Chelliah Committee Report are still valid and need attention of the concerned agencies for implementation:

- (a) A reasonably expeditious system needs to be evolved to reduce the time lag in making available the flow of funds accounts.
- (b) Dissemination of details of capital financing separately on foreign direct investment, domestic investment and borrowing, retained earnings of foreign controlled rupees companies and branches of foreign companies in National accounts.
- (c) The Perpetual Inventory Method of preparing the estimates of Consumption of Fixed Capital may be reviewed periodically for assumptions made regarding the average life of various assets.
- (d) All States should compile estimates of total capital formation.
- (e) Public sector information in respect of local bodies should be improved. States need to make arrangements for consolidation of statistics from the annual statements of receipt and expenditure in respect of their local bodies.
- (f) For improving the estimates of saving and capital formation for the corporate sector, the top 1500 companies (out of over 3 lakhs companies) which would account for a predominant proportion of total saving/capital formation should be covered on a census basis. For the remaining companies estimates may be built up on a sample basis.
- (g) The flow of funds data should be used for estimating household saving in the form of currency. For the years for which flow of funds data are not available, the average ratio for the past three years should be applied.
- (h) Consumer credit extended by banks and non-banking financial companies should be shown separately in the National Accounts Statistics.
- (i) Feasibility of conducting independent income expenditure surveys on a periodic basis should be explored for validation of the estimates generated by Central Statistical Organisation through residual method for the household saving in the form of physical assets.
- (j) Present All-India Debt and Investment Surveys (AIDIS) covers only households. Entire household sector includes unincorporated enterprises and non-profit institutions as well. To obtain the estimates of complete household sector, Enterprise Surveys on the lines of AIDIS may be designed and conducted periodically preferably every five years.
- (k) In the case of deep discount bonds and zero coupon bonds, interest accruing needs to be spread out.
- (l) All new financial instruments such as warrants which are traded apart from the underlying securities to which they are linked should be taken into account in the estimation of saving as and when complete relevant data become available.
- (m) Software and database, which are purchased from the market by the business enterprises should be treated as part of capital formation. However, the increase in productivity of the existing software due to development of utilisation techniques should not be treated as part of capital formation.

Guidelines for Bridging the Data Gaps in Regional Accounts

(Para 13.7.7)

- 22. Cost of Cultivation Studies: The Cost of Cultivation Studies (CCS) is conducted by the Directorate of Economics and Statistics, Ministry of Agriculture (DESMOA) through the agricultural universities. The number of crops covered in each State is

- very few and the sample size (about 10,000) is too small to give reliable estimates. The time lag in the release of the results of these studies is of the order of 3 years. For generating the input structure of different crops in each State/UT, it would be desirable to conduct large-scale sample surveys on inputs of agricultural crops by State Directorates of Economics and Statistics rather than the current practice of “studies”. This would enable coverage of most crops in all the States, a manifold increase in the current sample size and a reduction of the time lag in releasing the estimates with the help of computerisation.
23. **Index of Industrial Production:** Most States/UTs do not have a database on the industrial production in their States. The Annual Survey of Industries (ASI) is the only source of data on industrial activity in the States. As the ASI is annual and the time lag in the availability of its results being about two years, there is no data on the current industrial production scenario at State level. While there is an Index of Industrial Production (IIP) at the National level, the absence of a corresponding index for the States is a major data gap. The development and maintenance of an IIP by each State and UT would lead to an enormous improvement in the State Domestic Product estimates. The State/UT IIP could be used to prepare the Advance and Quick Estimates of SDP and would also act as a crosscheck to the ASI results. The States could consider using the frame/database of Directorates of Industries or/and the Central Excise or Sales Tax authorities. While the weights for different industry/commodity groups at State level could be taken from the ASI results, the monthly production figures collected either directly or from the database of the Central excise authorities, from a fixed sample (with suitable adjustments for new units, information on which is available with the above mentioned two organisations) would enable the States to have an IIP for their States.
 24. **Consumer Price Index:** Most States publish State-level Consumer Price Indices (CPI). All-India CPI for industrial workers and urban non-manual employees are based on CPI for various centres in the country from which price quotations are collected for this purpose. It is desirable for the States to review existing CPI or introduce State-level CPI (where none exists today) for the purpose of estimation of the State domestic product.
 25. **Corporate Sector Statistics:** For most services sectors, the GDP estimates are derived separately for the corporate sector, on the basis of the RBI’s company finance statistics. The same source is also used for generating domestic product estimates for the corporate sector segment at the State level. However, the size of the sample is considered too small even at the National level to give reliable estimates at industry-group level. At the State level, the estimates are not considered scientific even at the aggregate level, much less at the sectoral level. If States manage to compile corporate statistics (the number of corporations may not be many in a single State) on the basis of the frame available with the Regional Registrars of Companies, even once in five years, the quality of SDP estimates will considerably improve.
 26. **Benchmark Surveys of Enterprises:** Benchmark sample surveys of enterprises have been conducted about once during five years by Central Statistical Organisation (for directory enterprises) and National Sample Survey Organisation (for non-directory enterprises). A decision has been taken that the NSSO will carry out sample surveys for both sets of (manufacturing and service) enterprises. The States participate in these surveys with a matching sample. The results generated by NSSO are not designed to yield estimates of the State/industry group at the State level. If the Central and State samples could be pooled (copies of the filled-up NSSO schedules could be obtained from the NSSO Regional Offices located in the States) and

- analysed by the States, there would be a significant improvement in the quality of the SDP estimates that are based on these benchmark surveys.
27. **Annual Surveys of Enterprises:** The major data-gap in the Gross Domestic Product or the State Domestic Product estimates is considered to be the absence of annual surveys of enterprises (with the exception of registered manufacturing). This has also been so identified by the Regional Accounts Committee (RAC) in 1970s. However, due to various reasons (particularly attributable to lack of resources), the annual surveys of enterprises have not found a place in the statistical system of the country. However, it would be desirable to conduct these annual surveys of enterprises by using a fixed sub-sample of the benchmark sample (such a recommendation was also made by the RAC) and collecting information on about five items namely, employment, production/total receipts, salaries and wages, capital expenditure and changes in stocks. The problem of exits of the enterprises could be overcome by assuming that the proportion of exits in the fixed sample and the population is the same. For the new enterprises, which come into existence, a correction factor could be applied on the basis of information on the number of enterprises (for any segment of the enterprises for which such information is available) starting economic activity in the State, from the State Directors of Industries or the District Industries Centres.
 28. **Indicators to Extrapolate the Estimates Based on Five-Yearly Benchmark Surveys:** Currently, for the purpose of preparing annual Gross Domestic Product and State Domestic Product estimates on unorganised manufacturing and services sectors, various physical indicators of activity are used to extrapolate the benchmark estimates (for example, in the case of unregistered manufacturing, the Index of Industrial Production). However, it is essential to have a reliable set of proxy indicators and ensure that data are available on them on annual basis. The introduction of annual surveys on enterprises, stated in the above para, would generate the database required for extrapolating the benchmark estimates.
 29. **Local Bodies:** There are a large number of local bodies in each State and since they get grants from the State budgets and also generate their own resources (for example, municipalities), it is necessary that their budgets/accounts are analysed and expenditures properly accounted for in the State Domestic Product/Gross Domestic Product estimates, as also under other expenditure categories of National Accounts. Currently the estimates of local bodies are prepared on the basis of grants shown in the State budgets, which implies that resources generated internally by these bodies are not covered. At the Central Statistical Organisation (CSO) level, it is not possible to analyse the annual budgets of these local bodies' and efforts have to be initiated only at the State level. Appropriate inclusion of local bodies' expenditures in the State accounts will reflect a correct picture of the public sector component.
 30. **Capital Formation, Capital Stock and Consumption of Fixed Capital:** The State Directorate of Economics and Statistics should start compiling the estimates of Gross Fixed Capital Formation (GFCF), on the basis of the guidelines provided by the Central Statistical Organisation (CSO) from time to time. Once the States start compiling the GFCF estimates, a database on this could be developed, which in the long run, would be used for compiling the estimates of capital stock and CFC. State DESs should examine the guidelines in consultation with CSO for the compilation of capital formation, capital stock and CFC.
 31. **Appointment of Expert Groups:** For developing the State accounts as recommended by the Regional Accounts Committee (RAC), it is necessary that an Expert Group is appointed in each of the States. These Expert Groups would oversee the methodological aspects of the compilation of State accounts and make suitable

recommendations to the State Governments and also the Advisory Committee on National Accounts, from time to time. The States of Karnataka and Rajasthan have recently constituted Expert Groups to look into various aspects relating to the improvement of estimates of SDP and expenditure aggregates. Such expert groups must be constituted by other States as well. At present, the CSO looks after these issues in consultation with the Advisory Committee on National Accounts in respect of both National and State Accounts.

32. **Need for Resources:** Improvement in the quality of SDP estimates and other aggregates requires the introduction of various surveys and the development of database, besides the availability of adequate trained personnel. All these require resources. Importance needs to be attached to State income estimates. Without providing adequate resources, it may not be feasible for the States to come up with improvements in the State income estimates. In most States, only a skeleton contingent of staff have been given the responsibility of compiling the SDP estimates, which barely manages to put together the annual estimates. The State Income Units in various States must be augmented with qualified personnel. This could be done by the DESs by re-deploying the staff appropriately.
33. **District Domestic Product:** There has been an increasing demand for the estimates of the District Domestic Product (DDP) below the State level in the context of calculating district level human development index (HDI). The Commission would like to point out that (a) the DDP estimates, wherever currently available, cover mostly major agricultural crops only or at best commodity producing sectors covering agriculture and industry because of problems of data availability at the district level; (b) that available DDP estimates are calculated by income-originating (by sector of origin) method; (c) that conceptually, for HDI, what are needed are DDP estimates by the income accruing method in order to reflect district-level living standards; and (d) that currently available data do not permit calculation of DDP by the income-accruing method. It would be desirable to develop some appropriate indicators of the living standards at the village/block/district level. Techniques of small area statistics may be used to estimate these indicators on the basis of State/regional level statistics capabilities.

United Nations – System of National Accounts 1993

Extended Production Boundary

(Para 13.8.6)

34. For covering the production of goods within households for own consumption, the NSS consumer expenditure surveys need to account for these separately. Production of services by the households for their own consumption is not to be covered in the GDP estimates. However, output of services produced with the help of domestic servants, who are members of households need to be accounted in the GDP estimates. This might be quite difficult to capture separately in the present statistical system. The valuation of such services may be imputed on the basis of the value of output of domestic servants, who are Own-account enterprises in their own right.
35. Regarding concealed and underground production, many activities are covered implicitly, through the various approaches followed in the estimation of GDP. For example, in the case of agriculture, illegal crops are implicitly covered under the miscellaneous category “area under other crops”; in the case of firewood, the production estimates are made through consumption approach; in the case of construction, through commodity flow approach; and in the case of unorganised sectors, through the employment approach. The indirect approach of estimation

currently followed should be continued, as direct survey of concealed and underground production is not possible.

Saving and Capital Formation

(Para 13.8.12)

36. Type studies should be conducted on extended asset boundary to capture the necessary data like Cost of transfer of capital assets from one unit to the other unit; copyrights/patents, film originals, books and artistic originals; Defence expenditure on capital assets like vehicles, construction of buildings for office, hospitals, schools, roads, airfields, etc. which could be used for civilian purposes; Expenditure on purchase of software, databases, etc; and, information on valuables like: precious metals (non monetary gold if used as store of value) and stones, antiques and other art objects.
37. UN-SNA 1993 recommends that trees, which are repeatedly used to produce valuable goods, are to be taken as cultivated assets. It is recommended that the item, trees which are used repeatedly or continuously to produce product, such as fruits and rubber, be treated as capital formation.
38. The originals of films/books/research/artistic work, identified by copy rights/patents, need to be taken as a part of capital formation. The research and development expenditure should not be capitalised, when research succeeds, it results in new copy rights/patents which in turn get included in capital assets.
39. Defence expenditure on capital equipment such as radar, satellite launching system and vehicles, construction of buildings for offices, hospitals and schools, etc. and other construction works like roads, air fields, docks which are useable for civilian purposes, should be considered as part of gross capital formation as per UN-SNA1993.

Institutional Sector Accounts, and Sequence of Accounts

(Para 13.8.13)

40. Efforts should be made to develop suitable frames for non-financial corporations, households and non-profit institutions serving households and collect information on regular basis on their income and expenditures.
41. With regard to extended production and asset boundaries, as and when new estimates are introduced for extended production and extended assets (in relation to the existing boundaries in UN-SNA 1968), they be indicated in separate rows and not merged with the estimates in order to maintain UN-SNA1968 consistent boundaries, so as to maintain inter-temporal comparability of National Accounts aggregates.

INDIAN STATISTICAL SYSTEM

Central Statistical Organisation

Coordinating Role of Central Statistical Organisation

(Para 14.2.15)

1. The post of Director General (DG), Central Statistical Organisation (CSO), should be immediately filled up.
2. The practice of organising the Conference of Central and State Statistical Organisations once in two years should be revived.
3. A unit in the Central Statistical Organisation should be created for proper documentation of various papers connected with the meetings of the various technical committees. The Central Statistical Organisation should publish periodically technical monographs on different subjects piecing together recommendations relating to various issues.

4. The Central Statistical Organisation, as a coordinating agency, should maintain a pool of eminent experts in different subject areas. This would be useful for getting comments on various statistical matters quickly and also for constituting various committees and working groups on technical matters.
5. The Central Statistical Organisation should acquire membership of the important national as well as international statistical associations and institutions and participate in the conferences arranged by them so as to develop expertise in the field of official statistics.
6. In order to gain exposure to the methodologies adopted by other countries for compiling official statistics, arrangement should be made to get publications, journals and related documents brought out by the US Bureau of Census, Statistics Canada, Australian Bureau of Statistics, etc.

Economic Census and Follow-up Enterprise Surveys

(Para 14.2.25)

7. In future the operation of Economic Census should be part of house-listing operations of the decennial Population Census. For this purpose, the census Enumeration Blocks and Urban Frame Survey blocks have to be linked in a manner such that each Urban Frame Survey block is made up of a number of complete census Enumeration Blocks. Since this involves close cooperation between the Ministry of Statistics and Programme Implementation and the Office of the Registrar General and Census Commissioner, the issue should be taken up immediately. If for this purpose, changes are required in the Census Act, they should be made.
8. Proper remedial measures should be taken to improve the quality of data in the Follow-up Enterprise Surveys as the existing sampling design and method of data collection have failed to provide satisfactory data. The responsibility of designing all the Follow-up Enterprise Surveys should rest with the National Sample Survey Organisation.

Business Register

(Paras 14. 2. 26 to 14. 2. 28)

9. The Commission recognised the need for conducting a Survey of Non-Manufacturing Industries (SNMI) covering “bigger” units, other than those in the public sector. The “smaller” units are to be covered through Follow-up Enterprise Surveys of the economic census. To facilitate the SNMI, it is necessary to develop a list of such units for being used as the frame for sampling. The Commission feels that a beginning in this direction could be made by combining together available lists of such units – like the frame of the Fourth Economic Census, Annual Survey of Industries frame, lists maintained by the Department of Company Affairs, Development Commissioner of Small Scale Industries, Municipalities and Sales Tax Departments of State and Union Territory Governments, various Associations or Chambers of Commerce, etc. The list so developed should contain in addition to identification details of the units, other relevant items of information to make it a so-called Business Register.
10. The methodology for combining the lists, criterion for “bigness”, items of information to be included, procedure for updating the list are all complex issues, which should be left to a technical group for examination. To what extent this work can be done with the involvement of State Governments and local agencies should also be examined in consultation with the State Directorates of Economics and Statistics.
11. An approach indicated in the paper (see Annexe 14.1 in Volume II), prepared by the NSC Secretariat, could be used as a starting point by the technical group. The

Commission would however like to emphasise that after the project has been formulated, it should be implemented in phases starting with a pilot phase.

National Sample Survey Organisation

Functioning of National Sample Survey Organisation (Organisational Aspect)

(Para 14.2.61)

12. All activities of the National Sample Survey Organisation, presently excluded from the scope of the National Sample Survey Organisation Governing Council, such as Annual Survey of Industries, Price Collection, or Agricultural Statistics, should be brought within the scope of the Governing Council.
13. Highest priority should be given to develop specialised skills in the methodology of large-scale sample surveys.
14. The National Sample Survey Organisation through the Government of India should become an institutional member of the International Association of Survey Statisticians.
15. The nature of the departmental journal *Sarvekshana* should be changed to make it a medium of publication of technical papers based on NSS data or related to survey practice.
16. E-mail facilities should be made available to all offices of the National Sample Survey Organisation and video discussion facilities between pairs of important offices.
17. Steps should be taken to re-distribute total available resources, particularly investigators, among the States and Union Territories on a rational basis.
18. The practice of field visits by officers of the Survey Design and Research Division, Field Operations Division, and Data Processing Division followed up by interactive feedback sessions should be restored.
19. Planning for any survey should start well in advance so that necessary requirements could be completed in time.

Functioning of National Sample Survey Organisation (Methodological Issues)

(Para 14.2.62)

20. A Methodological Study Unit should be set up in the National Sample Survey Organisation to regularly undertake studies for bringing in improvements in the survey methodologies. The unit should be equipped with library and computer facilities. The requisite number of field and data processing staff should be transferred to this unit. Some topics which can be taken up urgently are listed below:
 - (a) Pilot studies on the effectiveness of intensive stratification and one-by-one sampling in place of systematic sampling.
 - (b) Theoretical and empirical studies on the use of time series data and information from sources outside the current survey, and to borrow strength from them to improve the precision of estimates through the technique of small area estimation.
 - (c) Exploring use of the rotational sampling design for selection of first stage units for repetitive surveys to make comparisons over time more precise and cut down the cost of listing of first stage units.
 - (d) Developing suitable procedures for data collection pertaining to the trade and services sectors to get better estimates of value added.

- (e) Reconciliation of divergence between data from different sources and assessment of their quality.
- (f) Ascertaining reasons as to why aggregates are usually underestimated in NSS while there is no such problem with averages and ratios.
- (g) Examining the feasibility of reducing the size of schedules canvassed by the NSS without affecting quality.
- (h) Extracting useful information from the listing schedule.

Functioning of National Sample Survey Organisation (Survey Programme)

(Para 14.2.63)

- 21. The present practice of covering various subjects with the existing periodicity should be continued. All the Follow-up Enterprise Surveys of Economic Census currently undertaken should be the responsibility of the National Sample Survey Organisation. A ten-year programme indicating the subject coverage should be prepared and released in advance for the benefit of the users.
- 22. There should be flexible arrangements for the inclusion of a few selected items of topical interest to the Government as an additional feature in the normal NSS programme.
- 23. The National Sample Survey Organisation should undertake, along with its normal programme, very short duration (monthly) surveys, each devoted to one topic of interest to any Government of India Ministry, and produce results in a short period. After trying this on a modest basis, if the experiment shows that the users appreciate the scheme of such supplementary surveys, the scheme should be incorporated on a permanent basis and the necessary additional resources provided to the National Sample Survey Organisation.

Functioning of National Sample Survey Organisation (Publicity Campaigns and Dissemination of Data)

(Para 14.2.64)

- 24. The commencement of a new survey and the main results of a concluded survey should be widely publicised through newspapers, magazines, radio and TV. Regular publicity campaigns should be arranged by the Government to apprise the respondents of the role played by the National Sample Survey in meeting the data requirements.
- 25. The National Sample Survey Organisation should identify two or three important characteristics in every round for quick release.
- 26. All publications of survey results of the National Sample Survey Organisation should contain an assessment of the associated errors.
- 27. The National Sample Survey Organisation should play an important role in apprising the Government, as early as feasible, of the changes taking place in the structure of the society, with respect to some of the important variables for which data are collected every year, like literacy level, employment-unemployment situation, sex ratio, consumption pattern, etc.
- 28. For providing an idea of the soundness of the estimates, the marginal totals of the number of reporting units should be indicated in the tables of the National Sample Survey reports for important survey characteristics.

Computer Centre

(Para 14.2.72)

- 29. The Government has already decided to reorganise the Computer Centre as the Data Storage and Dissemination Office (DSDO) to act as the central repository of various

data collected by the Government. It should be built by making use of modern data warehousing technology. A high-level technical group should be constituted immediately to work out the plan and a budget for setting up and maintaining the DSDO. As this is likely to take some time to be fully operational, the present Computer Centre should continue to take up data processing jobs for the proposed NSO.

Role of the Private Sector in Statistics

(Para 14.2.76)

30. Since the issue relating to data collection by private agencies is complex and important, the Commission recommends that the proposed National Commission on Statistics would formulate the necessary guidelines in this respect from time to time. Till then a committee of Central and State statisticians and experts outside the Government should go into all aspects of the question, before any data collection work is outsourced by any Government agency in India.

Modernisation Project

(Para 14.3.20)

31. It is understood that the project is under review by the Ministry of Statistics and Programme Implementation. While reviewing and reformulating it, the Ministry of Statistics and Programme Implementation should consider the recommendations made by this Commission on the various subjects and the components of the project may be modified accordingly, if necessary. For this, the project will have to shift its focus from expansion of sample surveys to improvement of the systemic issues of the administrative statistical system. Modernisation may be considered as a means for that purpose. It should also keep in view the essentially decentralised character of the Indian statistical system and ensure that the States' statistical systems are interwoven in the project architecture.

Bringing all Technical-cum-supervisory Positions under Indian Statistical Service

(Paras 14.3.21 & 14.3.22)

32. Statistical units of Central Ministries and Departments can be grouped into three main types:
 - (a) Those headed by ISS officers;
 - (b) Those headed by officers from other organised services;
 - (c) Those headed by officers not belonging to any organised service.
33. With an organised Indian Statistical Service (ISS) in place, the continued existence of ministries and departments of types (b) and (c) above is a serious anomaly. It appears to be a historical legacy of the birth of the ISS from voluntary offering of posts by different ministries and departments. To bring about uniformity in management and strengthen coordination, the Commission recommends that all technical-cum-supervisory statistical positions in the Central Government should be brought under the umbrella of the ISS. However, this does not preclude Government from appointing in a few senior positions, professional statisticians with proven capability on an appropriate arrangement.

Filling up of Vacancies

(Para 14.3.23)

34. The Commission notes that a number of positions at the highest and middle levels of the hierarchy in the ISS have remained vacant for long periods. For the sake of proper functioning of the statistical system, these positions must be filled up immediately.

Implementation of above Recommendations

(Para 14. 3. 24)

35. The Commission is of the view that for correcting the systemic problems of the Indian statistical system, it is necessary to revamp and restructure the statistical system, starting from the top, by laying down a firm and lasting foundation for the Indian statistical system. Implementation of the above recommendations should proceed immediately and independently of the creation of the National Commission on Statistics. The existing institutions of National Advisory Board on Statistics (NABS), Governing Council of National Sample Survey Organisation, Advisory committee on National Accounts Statistics and other technical Committees and institutional arrangements should also continue till the National Commission on Statistics is created.

RESTRUCTURING THE INDIAN STATISTICAL SYSTEM**National Commission on Statistics**

(Paras 14.5.1 to 14.5.6)

36. The creation of a permanent and statutory National Commission on Statistics (NCS) is envisaged as a pre-requisite for improving the System. This is more or less on the lines of the UK except that the Indian NCS would have more authority in certain respects to cope with the federal structure of the Indian polity.
37. The Commission recommends creation of a permanent and statutory apex body – the National Commission on Statistics – independent of the Government and responsible to the Parliament in respect of policy making, coordination and certification of quality of Core Statistics.
38. The National Commission on Statistics should be entrusted with functions broadly categorised as follows so as to:
- (a) Serve as a nodal and empowered body for all core statistical activities of the country.
 - (b) Evolve, monitor and enforce statistical priorities and standards.
 - (c) Ensure strong co-ordination through a closer linkage between statistical programming and budgeting.
39. The National Commission on Statistics will be constituted through an Act of Parliament. It will determine the areas of official statistics that are to be considered as core or critical to the functioning of the economy and accordingly prioritise the statistical activities of national statistical system. The statistics defined under critical areas could be called Core Statistics. The Core Statistics will have the following characteristics:
- (a) They should be of national importance;
 - (b) It will be mandatory for the Governments at all levels to collect and disseminate them;
 - (c) They should conform to prescribed definitions, concepts and standards laid down by the Commission;
 - (d) They should be updated periodically, with suitable periodicity to be determined; and
 - (e) They will be available at both aggregate and disaggregate levels, wherever appropriate.
40. The Core Statistics will be identified and accessed from all critical areas of the economy including agriculture, socio-economic sector, demographic, industrial, labour and employment, finance. The National Commission on Statistics will ensure

that the production of statistics and their release are free from Government influence, by designating appropriate statistical institutions or functionaries to be solely and independently responsible for these functions. In designating the statistical institutions or functionaries for the collection and release of Core Statistics on different subjects, the National Commission on Statistics will adhere to the distribution of subjects in the Union, State, and Concurrent Lists of the Constitution of India. Though the compilation and release of statistics will be the sole responsibility of the agency concerned, the National Commission on Statistics will exercise a statistical audit over the statistical activities to ensure quality and integrity of the statistical products. The Act would empower the National Commission on Statistics to make it binding on all agencies responsible for the Core Statistics to comply with the directives of the National Commission on Statistics. The National Commission on Statistics would be required to submit its Report annually to Parliament regarding its own functioning, and that of other statistical agencies and about the statistical situation in the country.

41. The directive principle for the National Commission on Statistics will be that it shall work within the framework of a decentralised national statistical system, both laterally among Central Ministries and vertically among the State Governments. In this context, it would be pertinent to mention that the national-level statistics, in most cases, will be merely State-level aggregation of statistics. Particularly, its orientation shall be that:
- (a) National statistics would mean entire set of statistics collected officially from administrative returns or through sample surveys.
 - (b) Statistics at the all-India level are an aggregation of State-level statistics in most cases.
 - (c) In advising on the collection of Core Statistics, the National Commission on Statistics would keep in view the optimum use of national resources, in context of essentially decentralised character of statistical system. The national resources mean the resources of both Central and State governments together.
 - (d) Further, the proposed system shall provide a direct approach by the States to the National Commission on Statistics on any statistical issue, and
 - (e) The States shall have the opportunity to bring directly to the notice of the National Commission on Statistics, their reservation on any policy decisions taken by the Commission and to request for its consideration.

Mission Statement

(Para 14.5.7)

42. The Mission Statement of the Indian statistical system shall be *to provide, within the decentralised structure of the system, reliable, timely and credible social and economic statistics, to assist decision-making within and outside the Government, stimulate research and promote informed debate relating to conditions affecting people's life.*

Functions of the National Commission on Statistics

(Para 14.5.8)

43. Within the framework of the decentralised system, the functions of the National Commission on Statistics would be to:
- (a) Evolve and arrange to monitor the nation-wide strategies on Core Statistics; updating the list of Core Statistics; framing and monitoring the advance release calendar; dissemination of data;

- (b) Evolve and arrange to monitor the nation-wide strategies on: Human Resource Development for Official Statistics; Information Technology and Communication needs of the Statistical System;
- (c) Improve Public Trust in Statistics by: increasing and promoting public awareness of Official Statistics; monitoring and ensuring reduction of respondent burden; arranging interaction with data users;
- (d) Function as Apex Authority on Statistical Co-ordination: between Central Ministries, Departments and other Central agencies; between Central and State Governments;
- (e) Ensure Quality Assurance of Statistical Processes: evolve and enforce appropriate statistical standards; declare quality with statistical releases; audit statistical activities; determine modality of the release of data;
- (f) Constitute Technical Committees or Working Groups to assist the National Commission on Statistics in performing various functions;
- (g) Assess legislative requirements periodically.

Constitution of the National Commission on Statistics (Paras 14.5.9 to 14.5.11)

44. The National Commission on Statistics will have a Chairman and four Expert Members. Since the National Commission on Statistics would be primarily a policy-making body working through a number of technical committees and should not be involved in routine administration, given the function of the National Commission on Statistics and the time that the Chairman and members are expected to devote to them, the Chairman and the members should be appointed on a part-time basis. The tenure of both would be 3 years. For administrative purposes, the status of the members should be at least that of Secretary to the Government of India. The Chairman and members will be eminent statisticians or social scientists and represent the following indicative areas of specialisation:
 - (a) Agriculture and allied areas including, Meteorology and Environment;
 - (b) Industry, Trade, Finance, National Accounts and Infrastructure;
 - (c) Population, Health, Education, Level of Living, Labour, Employment and other Socio-economic Sectors;
 - (d) Survey Design, Analysis and Statistical Modelling;
 - (e) Statistical Information System and Information Technology;
 - (f) State Statistical Systems.
45. The National Commission on Statistics would be assisted by technical committees in the following illustrative list of subject areas:
 - (a) Agricultural Statistics
 - (b) Industrial Statistics
 - (c) Price Statistics
 - (d) Trade statistics
 - (e) Social Statistics
 - (f) Infrastructure Statistics
 - (g) National Accounts Statistics
 - (h) Large-scale Sample Surveys
 - (i) Information Technology.

46. For budgetary purposes, the National Commission on Statistics would be in the Ministry of Statistics. The Secretary of the National Commission on Statistics would be the head of the National Statistical Organisation (NSO) described below. He will be called the National Statistician and would also be the Secretary to the National Commission on Statistics. He will have the rank of a Secretary to the Government of India. To assist him in the responsibilities, a core secretariat should be established in the National Commission on Statistics. The post of National Statistician will not be reserved for any organised service of the Government of India. Recruitment will be made by open selection from among professional statisticians with long technical and managerial experience in large statistical organisations.

National Statistical Organisation

(Para 14.5.12)

47. The National Commission on Statistics will operate through the National Statistical Organisation (NSO), which will be the official agency to implement policy decisions of the National Commission on Statistics. The NSO will function as the single full-fledged Department of the Ministry of Statistics of the Central Government headed by the National Statistician, who would be the Secretary of the Department. Essentially, the NSO would be the restructured form of the present Statistics Wing of the Ministry of Statistics and Programme Implementation. The National Statistician, will be its technical and administrative Head. The National Statistician, would broadly be responsible for the following activities:

- (a) To provide leadership to statistical activities by promoting coordination with components of the national statistical system, particularly with the State Directorates of Economics and Statistics;
- (b) Assist in evolving and implementing the National Statistical Strategy;
- (c) Assist the National Commission on Statistics to decide and reallocate statistical priorities;
- (d) Promote reliability and integrity of statistics;
- (e) Formulate and implement plan scheme in statistics (as ex-officio Adviser, Statistics to the Planning Commission).

Functions of the National Statistical Organisation

(Para 14.5.13)

48. The envisaged functions of the National Statistical Organisation are enumerated below:
- (a) Implement and maintain statistical standards and coordinate statistical activities of Central and State agencies as laid down by the National Commission on Statistics;
 - (b) Compile National Accounts according to the latest international standards at regular periodic intervals;
 - (c) Collect or arrange to collect Core Statistics, which have not been collected so far;
 - (d) Participate in regional, national, and international statistical forums and meetings;
 - (e) Carry out methodological research and studies;
 - (f) Publish Core Statistics at regular intervals together with critical analysis regarding the quality of data and implication of the use of data in policy making and administration;

- (g) Arrange in-service training course for statistical personnel, in cooperation with universities and research institutes;
- (h) Maintain a “warehouse” for Core Statistics, for dissemination amongst all users in the public and private sectors inside and outside the country and serve as the sole provider of information to foreign Governments, international bodies and United Nations agencies.

Proposed Structure of the National Statistical Organisation (Para 14.5.14)

49. The NSO will comprise the following four Offices. The present rank and status of the heads of the first three Offices, which now form the Statistics Wing of the MoS&PI, should be maintained.

- (a) Central Statistical Office (CSO), to replace the present Central Statistical Organisation;
- (b) National Sample Survey Office (NSSO), to replace the present National Sample Survey Organisation;
- (c) Data Storage and Dissemination Office (DSDO), to replace the present Computer Centre;
- (d) Consultancy Wing (CW), new.

These will be divided into a suitable number of Divisions.

Central Statistical Office (Para 14.5.15)

50. The Central Statistical Office will comprise the following Divisions with functions given below the names:

- (a) Coordination, Standards and Administration Division
 - Formulation and maintenance of statistical standards in coordination with statistical agencies inside and outside the country;
 - General Administration and Budget.
- (b) Human Resource Development Division
 - Cadre Management – to maintain job and personnel database, arrange cadre review, filling up vacancies, transfer and posting;
 - Assessing training needs, arrange training programmes.
- (c) National Accounts Division
 - Compilation of National Accounts, Comparable State Domestic Product, Input Output Transaction Table, Capital formation, etc.
- (d) Economic Statistics Division
 - Expanded form of the present Industrial Statistics Division to be responsible for Annual Survey of Industries (ASI), Index of Industrial Production, Economic Census, Business Register, etc.
- (e) Social Statistics Division
 - Social Sector Statistics, Environment Statistics, Index Number of Prices and Cost of Living, etc.
- (f) Research and Publications Division
 - Methodological Research on applicable theoretical innovations, Empirical research based on statistics collected in different subject areas, Reconciliation of the data generated from different source agencies, Publication of occasional research papers.

National Sample Survey Office

(Para 14.5.16)

51. The National Sample Survey Office will comprise the same four Divisions with more or less the same functions as those of the present NSSO.
- (a) Survey Design and Research Division (SDRD)
 - Plan and design sample surveys conducted by the National Statistical Organisation;
 - Develop and maintain suitable frames for sample surveys;
 - Prepare instructions, validation and tabulation programmes, report generation, etc. for the surveys;
 - Undertake studies in survey design and quality aspects of surveys;
 - Assess sampling and non-sampling error of survey data.
 - (b) Field Operations Division (FOD)
 - Undertake fieldwork for surveys of the National Statistical Organisation;
 - Explore improvements in data collection methodology jointly with SDRD.
 - (c) Data Processing Division (DPD)
 - Transcribe, clean and tabulate survey data;
 - Develop related software.
 - (d) Coordination and Publication Division (CPD)
 - Monitor survey activities;
 - Publish survey reports and the journal, *Sarvekshana*.

Data Storage and Dissemination Office

(Para 14.5.17)

52. The Data Storage and Dissemination Office (DSDO), with no break-up into Divisions, would perform the following functions:
- Acquire from different sources Core Statistics, organise, store and disseminate them on electronic media and serve as a data warehouse;
 - Train data users;
 - Use excess capacity for data processing.

Consultancy Wing

(Paras 14.5.18 to 14.5.20)

53. The Consultancy Wing (CW) would cater to the increasing demand for professional statistical services, especially within the Government. The Consultancy Wing will aim to cater to the increasing demand for investigations and studies of a statistical nature and provide related professional statistical services that cannot be accommodated in the existing arrangements within the Government. This Wing would essentially function as an autonomous body and aim to be the commercial wing for professional statistical activities. In its nascent stage it will be nurtured by the National Statistical Organisation, before it hives off as an independent corporate entity outside the Government.
54. To start with, it may undertake projects from governmental and international agencies regarding data collection, processing, analysis and report generation through sample surveys or other means on topics assigned to it. It could also take-up consultancy services relating to statistical problems including methodological studies and model building. It would carry out detailed analytical reporting, consultancy (both national and international) and compete in the consultancy market on commercial terms. Some of the activities include methodological studies,

surveys, macro-econometric modelling and forecasting and consultancy to the State Governments. It will adhere to the appropriate statistical standards and methodology. The Consultancy Wing would be free to hire skilled personnel for project-specific work including officers of the ISS on deputation.

55. This being a new activity, the Commission recommends that the organisational structure for it should evolve along with the growth of its activities.

Improvement of Lateral Coordination at the Centre through Statistical Advisers (Para 14.5.21)

56. At present there is no institutional mechanism through which the MoS&PI can effectively coordinate with different ministries at the Centre in statistical matters. The Commission is of the view that heads of the statistical divisions in the ministries and departments should be responsible for the professional integrity in the statistical activities of their departments and improvement of these activities. In discharging their responsibility, they will work closely with the National Statistician as the head of the national statistical system. They will be responsible to the National Statistician for the professional quality of their work. They will collaborate with the National Statistician in their professional responsibilities while remaining in the administrative organisation of their ministries or departments. The heads of the statistical divisions, to be designated as Statistical Advisers, would thus have dual responsibilities – assisting the concerned ministry in matters of statistics and coordinating with the National Statistician in respect of maintenance of quality standards as laid down by the National Commission on Statistics. Considering the high level of responsibility of their posts, the Commission recommends that the Statistical Advisers in the major ministries or departments, such as Agriculture, Industry, Commerce, Finance, Health, Water Resources, etc. would be of rank one step below the National Statistician, while in other ministries and departments, the Statistical Advisers should be of a sufficiently high rank (see Annexe 14.9 in Volume II). The Statistical Adviser would:

- (a) Be designated as the 'Nodal Officer' with regard to all statistical matters pertaining to the ministry or department;
- (b) Assist the Secretary of the administrative ministry or department in all statistical matters;
- (c) Be associated closely with the National Statistician in implementing the guidelines outlined by the National Commission on Statistics;
- (d) Coordinate flow of information to and from the National Statistical Organisation.

Improvement of Coordination with the States by Empowering the State Directorate of Economics and Statistics (Paras 14.5.24 to 14.5.27)

57. The Directorates of Economics and Statistics should be formally entrusted with the responsibility for a periodic review of the content, methodology and output of the statistics of all State Departments and to make suggestions for the further improvement of these statistics. The Conference of Central and State Statisticians should be held regularly. A similar forum for a meeting of State Departmental Statisticians should be created by the State Governments to review the performance of the statistical system of each State. The report of the review and the suggestions may be forwarded by the Directorates of Economics and Statistics to NSO and by the departments to the corresponding ministries, for action at the Centre.

58. The enhanced role of the Directorate of Economics and Statistics, and the wider technical discussion of the State's Statistics will help State Governments take a holistic view of the State's Statistical system to enhance its utility to the State Governments and indirectly to achieve the same result at the Centre.
59. A Centrally-sponsored scheme for strengthening the statistical system in the States should be drawn up immediately for inclusion in the Tenth Five Year Plan, with the specific objectives of developing a survey and data-processing capability in the States.
60. The earlier mechanism of setting up working groups in the Central Statistical Organisation to formulate the plan schemes in statistics at the all-India and State levels should be revived immediately for the Tenth Five Year Plan.

The States' Statistical Systems

(Para 14.6.34)

61. The breakdown of the Administrative Statistical System needs the immediate attention of the highest authorities of State Governments. They are urged to take steps to reduce the burden of the additional work given to lowest-level government functionaries such as *patwaris* and primary teachers so that they can effectively carry out the statistical functions assigned to them.
62. The authorities should also instruct the offices implementing different Acts and Rules to be vigilant that all relevant units file with them regularly the statutory statistical returns required by the Acts and Rules, and take necessary action under the Acts against the defaulting units.
63. The State Directorates of Economics and Statistics (DESSs) should develop capabilities to tabulate data on demand and to analyse data from different sources. For this they should organise all the data that the State's statistical system possesses in an appropriate manner.
64. The State Governments should accord priority to computerisation of administrative offices that generate administrative statistics.
65. The Directorate of Economics and Statistics should fully exploit the potential of their participation in the National Sample Survey programme by using the survey data as a data-bank and by utilising the survey mechanism for *ad hoc* collection of additional simple data required by the Government.
66. The State Governments should support the Directorate of Economics and Statistics in the creation of sample survey capabilities by creating sample survey divisions in them.
67. The State Governments should make the necessary resources available to the Directorate of Economics and Statistics for computerisation and development of necessary software to make the Directorate of Economics and Statistics self sufficient in this respect. This will help them to undertake tabulation of NSS data, which they are collecting in their matching samples.
68. The Directorate of Economics and Statistics should develop the necessary analytical capabilities to carry out data-analysis relevant to the problems of decision-making of the Government.
69. For strengthening the effectiveness of the statistical system of the Government, the State Governments should create a separate Department of Statistics by elevating the existing Directorate of Economics and Statistics to the level of a Department and the Director of the existing Directorate of Economics and Statistics to the level of Secretary to the Government. The Department of Statistics should have complete freedom in statistical work. The head of the Department of Statistics should be a professional statistician or a professional economist with experience in large-scale data collection and empirical analysis of data.

70. The State Governments should closely involve the Director of Directorate of Economics and Statistics in its decision-making processes by making him a member of or an invitee to committees and groups dealing with plans and programmes in substantive fields.
71. The State Governments should strengthen the role of the Directorates of Economics and Statistics as coordinators of their statistical activities by empowering them to take a technical review of the statistical activities of all departments every year. The Directorates of Economics and Statistics should also be asked to make a report to the Government of its comments on and suggestions for these activities. The Directorates of Economics and Statistics should also be authorised to convene a biennial conference to review the State statistical system and its activities.
72. The State Governments should take steps to create a common statistical cadre and State Statistical Service for manning statistical posts in all departments.
73. The heads of the departments of the State Governments should closely involve their departmental statisticians in their decision-making process. To give institutional support to their role, the departmental statisticians should be placed directly under the head of the department.
74. In view of the renewed importance of the Block Statistical Organisation in the context of local area planning, the State Governments should bring it directly within the fold of the States' Statistical System by either transferring the organisation to their Directorates of Economics and Statistics, or by making it responsible for its statistical work to the Directorate and bringing it under the Directorate's technical supervision through the district statistical organisation.
75. The State Governments may consider setting up commissions or committees to advise them on the manner of implementation of these recommendations and on other issues relating to States' statistical system.

Information Technology in the Indian Statistical System

(Para 14.7.31)

76. The Government must develop and nurture expertise and skills in various areas of specialisation – statistical software being one of the most important amongst them. Training and transfer policies must be framed accordingly. Transferring specialist officials to positions, in which their specialised knowledge is of no use, is a waste. A software group consisting of systematically trained officers in Information Technology tools should be set up in the National Statistical Office, to meet all software requirements of the National Statistical Organisation. When in-house expertise and resources are not available, data processing or software development projects could be given to agencies of proven competence.
77. The area of application of computers should be widened to cover statistical modelling, forecasting, simulation, and other sophisticated “applicable” theoretical methods.
78. It is essential to establish strong communication links between:
 - The National Statistical Organisation (NSO) and all its subordinate offices;
 - The National Statistical Organisation and all Central Ministries with substantial statistical output;
 - The National Statistical Organisation and all State Directorates of Economics and Statistics (DESSs);
 - The National Sample Survey Office and its Survey Design and Research Division, Data Processing Division, Field Operation Division and Coordination and Publication Division;

- Headquarters of Data Processing Division, Field Operation Division and their respective subordinate offices;
 - State Directorate of Economic and Statistics and statistics divisions of the departments.
79. These offices should be networked through one or more Internet Service Providers, and/or one or more Virtual Private Network. A dedicated computer network is neither necessary nor desirable and would not at all be cost effective.
 80. Urgent steps must be taken to strengthen computer hardware and software systems in the State DESs.
 81. To cut down travel expenses and waste of time, it would be more economic and convenient to go in for video conferencing facilities, which are comparatively inexpensive when held between a pair of participants.
 82. Before investing in expensive sophisticated equipment, a feasibility study including cost-benefit analysis must be carried out. When the equipment are to be used by primary workers under field conditions, as in the case of palmtop or laptop computers, practical difficulties of maintenance, repair, local availability of consumables and the procedural problems of handing over expensive government property to primary workers should be carefully examined.
 83. Specifically in respect of palmtop and laptop computers, the Commission is of the view that these are not needed for collection of data in large-scale sample surveys at present except when information content is small. The large number of palmtop computers already purchased, if they are still serviceable, should be used in surveys with small information content – price data collection for example.
 84. However, methodological studies on Computer Aided Interviews, as a collaborative venture of survey practitioners, software specialists, subject-matter specialists and psychologists is strongly recommended. The first attempt should be to reduce the questionnaire to a reasonable size, which can be honestly answered in less than one hour. The question of development of appropriate software is of second priority. It should be emphasised that software for laptop computers can very well be developed on Personnel Computer's and no investment on laptop computers would be necessary for this methodological study.
 85. For mobile applications, a few laptops should be available in each large statistical office.
 86. In the Annual Survey of Industries or in the envisaged survey of non-manufacturing industries, attempts should be made to collect information on electronic media from enterprises, which use computers for accounting purposes.
 87. The existing practice of publishing survey results in the form of multiple cross-classified tables with, in many cases, a large number of empty cells, should be stopped. Only readable reports, with simple tables and their interpretation, should be published. For experts and professionals, the results and unit-level data should be made available in an electronic medium like a Compact or Floppy Disk. Survey results and other important statistical information should be put on the website of the National Statistical Organisation.
 88. There should be regular computer training programme for statistical personnel at all levels.
 89. The Commission has noted with serious concern that there are occasions when the unit level data as well as summary tables computed from them, both disseminated under the National Policy on Data Dissemination, do not match. In order to establish its credibility, the Government should investigate the reasons for the discrepancies

and assign institutional responsibility for the failure. A case of immediate concern is the data and results of Annual Survey of Industries 1995-96.

90. A Standing Technical Committee on Information Technology should be set up in the proposed National Commission on Statistics, to lay down policies and review their implementation.
91. A website of all classification, concordance tables along with online database query system should be developed for public use. This system should help the user in identifying a code on the basis of part description or key words.

Legal Provisions for the Statistical System

Need for Broader Legislation

(Para 14.8.9)

92. In the following paragraphs, legislative requirements for the three sets of Acts are discussed separately. Whether these could be incorporated into a single Act is a matter for legal experts to decide.

Legislation in respect of proposed National Commission on Statistics

(Paras 14.8.10 to 14.8.12)

93. This being a new arrangement, various aspects of the Commission's functioning, its relationship with different official agencies, other institutions, etc. as also the necessary mechanisms required for its effective functioning, have to be examined in detail and appropriate legislation thereof has to be put in place. However, to ensure that the legislation is actually effective in practice and fulfils its objectives it would be desirable, not to draft it in advance but to let it be evolved by the proposed Commission itself, taking into account the ground realities, the emerging requirements, etc. when it starts to function. It is therefore suggested that the National Commission on Statistics be established as early as possible (within six months) with a modicum of authority, through a Government Order. Thereafter, in consultation with the Law Ministry and other appropriate agencies and in the light of its own operational experience, the National Commission on Statistics could evolve within a short period the appropriate legislation. This is in fact the procedure adopted by the National Statistics Commission of the United Kingdom, which came into being on 7th June 2000 by a Government Act. The United Kingdom Commission is still working on the legislation to define its status.
94. The proposed National Commission on Statistics, which is envisaged to be a high-level nodal body accountable to the Parliament and having a policy-making, standard-setting and coordinating role for the statistical system, has to be empowered for the crucial role of framing legislation.
95. Legislation for the proposed National Commission on Statistics should *inter alia* address the following important issues:
 - (a) Constitution
 - (b) Status, powers and functions
 - (c) Terms and conditions of service of Chairman and Members of National Commission on Statistics,
 - Procedure for Appointment and Termination,
 - Powers of Chairman and Members.
 - (d) Modalities of functioning of National Commission on Statistics;
 - Obligation to Parliament;

- Relationship with National Statistician, National Statistical Office, Central and State Ministries and Statistical agencies/institutions;
 - Meetings of the Commission;
 - Constitution of expert technical committees in different branches of Statistics;
 - Provision for hiring Technical Consultant;
 - Mechanism of interacting with the User and Producer of Statistics.
- (e) Mandate of National Commission on Statistics on Core Statistics
- Defining the scope of Core Statistics;
 - Periodicity and procedure for collection of Core Statistics;
 - Delegation of powers to Central and State Ministries and other Statistical offices for collection of Core Statistics;
- (f) Budget, Accounts and Audit;
- Implementation aspects of Statistics Act;
 - Provision for obligatory transparency in the work of Commission.

Legal Provision for Collection of Statistics

(Paras 14.8.13 to 14.8.15)

96. Necessary legal provisions should be made, either by expanding the scope of the present Collection of Statistics Act (1953) or by passing new Act or Acts to:
- (a) Cover any topic under “Core Statistics”, as defined by the proposed National Commission on Statistics;
 - (b) Make it obligatory on the part of individuals, or enterprises, or State and private agencies to provide the information sought for any survey under the aegis of the National Commission on Statistics;
 - (c) Provide right of access to records, including the record of Government agencies for statistical purposes;
 - (d) Ensure the informant’s right to privacy by making it illegal to publish the identity of the informant, or by requiring him to furnish sensitive information;
 - (e) Provide penalties for informants, for their refusal to supply, or for willfully supplying wrong information;
 - (f) Make it a penal offence for a statistical officer authorised to collect, process, or disseminate information collected from any survey under the Act, to willfully distort or manipulate the data.
97. Though Clauses 3(a), (b) and (c) of the Collection of Statistics Act (1953) on the one hand gives the State Governments the right to name a Statistical Authority, it seems to be substantially negated by subsequent provisions of the Act under the same clause. As a matter of fact, though there have been occasional requests from other data-collecting agencies to be named as Statistics Authority under the Act, the Government of India had seldom agreed to such a request. The sole Statistics Authority for the Annual Survey of Industries has always been the Head of the Field Operations Division of the NSSO, while the States have also been engaged in collection of ASI data, without any such Statistics Authority. To strengthen the attempts of the States to collect industrial statistics, particularly through the ASI, the Government of India should delegate to them, as was done earlier, the necessary legal authority.

98. Though “Statistics” is under the Concurrent List of the Constitution and “Surveys” is only under the Union List, it is more important that the collection of statistics on any subject vests in the authority (Central Ministry or State Government Department) that is responsible for that subject according to its status in the Union, State or Concurrent Lists in the Constitution of India. When the National Commission on Statistics determines certain statistics as Core Statistics, in deciding on the agency that should be responsible for their collection, it will have to do so in consistence with the distribution of subjects in the three Lists. Therefore, when proposing legal measures for Core Statistics, the National Commission on Statistics may have to propose different Acts for different subjects according to the List to which the subject belongs.

Modification of the Census Act

(Para 14.8.16)

99. Twice in the past, the Economic Census of India had been carried out as part of the house-listing operation of Population Census. Recently doubts have been raised, whether the Census Act permits this, and consequently the Economic Census has been de-linked from the Population Census. The Commission is of the view that it would be desirable to revert back to the old practice and modify if necessary the Census Act, 1948 and Census (Amendment) Act, 1993 for this purpose.

Statistical Audit

Items for Audit

(Para 14.9.7)

100. A fairly long but not exhaustive list of items, which could be audited is given below:
- (a) Theoretical concepts and their modification into operationally feasible definitions, covering individual respondents, population of such respondents, sampling unit and information unit, frame and its adequacy, information to be collected from the respondents, etc.;
 - (b) Methods of data collection and handling: Interview, Direct observation or measurement, copied from records, mail enquiry, etc.; Steps to avoid respondents’ or interviewers’ bias; Treatment of sensitive questions; Deliberate redundancy to check consistency of information; Data transcription and scrutiny; Classification and coding; Choice of reference period and survey period; Design of questionnaire or schedule; Instruction manual;
 - (c) In the case of secondary data acquired from administrative records – design of the form for recording and summarising, incomplete coverage and treatment of missing data, definitional consistency, checks on arithmetical errors;
 - (d) Sampling design: uni-stage or multi-stage, procedure for stratification and selection at every stage; Formula for estimation of parameters;
 - (e) Procedure for control and assessment of sampling and non-sampling errors; Manual and computerised procedures of scrutiny and editing of data; Methods for imputation of missing or rejected observations;
 - (f) Data handling errors – Errors in data capture, editing, coding of open-ended textual responses, data processing, etc.

Obligation of Producers of Core Statistics

(Para 14.9.8)

101. It will be obligatory for every producer of Core Statistics to supply a copy of their report to the National Commission on Statistics for audit. The producer of the report

should certify that all standards set by the National Commission on Statistics have been met, or draw attention to deviations, in case there are any. Their reports must contain information on all the above items for audit. In addition, the report should give its own assessment of the magnitudes of sampling and non-sampling errors associated with the more important statistics produced by them.

Audit Procedure

(Para 14.9.9)

102. The National Commission on Statistics may accept the producer's certificate or carry out an audit of the report and related documents through the National Statistical Organisation. For the purpose of the audit, the National Commission on Statistics may call upon the producer to supply additional records or documents. The result of the audit would be communicated to the producer and would also be included in the annual report of the National Commission on Statistics.

Human Resource Development

Training

(Paras 14.10.16 & 14.10.17)

103. A suitable Central Training Facility for Indian Statistical Service officers and senior statistical officers of State Governments, equipped with accommodation, arrangement for food, lecture rooms, computer laboratory, and library should be constructed for trainees and visiting teachers.
104. There is an immediate need for extensive arrangements for training of trainers so that when availability of qualified trainers is assured, eventually the Central Training Facility could be transformed into a Training Academy.
105. Arrangements for training of subordinate operational staff should be decentralised and separate. The existing in-house training facilities of NSSO should be further strengthened.
106. It should be made mandatory for each Indian Statistical Service officer to undergo Refresher Training for a period of at least four weeks in every two years. The training could be either in-house at the Ministry of Statistics and Programme Implementation or at any other Institute in India or abroad. Training in respect of new practices in official statistics could be arranged in-house or through participation in training programmes arranged by professional agencies like the International Association of Survey Statisticians, the U.S. Bureau of Census, Statistics Canada, etc. For broadening the knowledge of 'applicable' statistical theory, training arrangements could be made with universities in India or abroad or with reputed research and training organisations like the Indian Statistical Institute, Indian Agricultural Statistics Research Institute, etc. Study leave with financial support should be provided to promising ISS officers working for doctorate degrees in relevant subjects.
107. Refresher Training Courses should be arranged in the following illustrative list of areas:
 - (a) Principles of Economics
 - (b) Communication skills
 - (c) System of National Accounts
 - (d) Time Series Analysis, Forecasting and Modelling
 - (e) Small Area Estimation
 - (f) Geographic Information System
 - (g) Management

- (h) Information Technology
 - (i) Classificatory Analysis
 - (j) Market Research.
108. Indian Statistical Service (ISS) officers should be eligible for Sabbatical leave for pursuing advanced studies related to their area of specialisation.
 109. Training and deployment should be linked. The Cadre Management system should be suitably streamlined for this purpose.
 110. The Annual Training Calendar should be announced in advance.
 111. The content of the Junior and Senior Certificate Courses in Statistics should be reorganised into smaller modules and offered on a large scale to the supporting statistical personnel (both from the Central and State Governments) who need training at this level. The training also should be decentralised and organised by State Directorates of Economic and Statistics. The Ministry of Statistics and Programme Implementation should organise Training of Trainers Sessions for this program.
 112. In order to achieve closer collaboration between academicians and professionals, a suitable system should be developed to enable teachers and researchers from academic institutions to work in the Ministry of Statistics and Programme Implementation, Government of India and vice-versa.
 113. The Commission further recommends that a high-level committee should be set up by the Government of India to evolve a long-term plan for assessing and effectively meeting the training needs for the Central and State Statistical Systems, consistent with what would be expected from the system. The said committee should also be required to examine in this connection whether a Staff Training Institute is necessary and feasible, or, whether the need could be met through cooperation with existing organisations. Such a Committee could comprise as its members, amongst others, the Director of the Indian Statistical Institute as also the envisaged National Statistician besides eminent statisticians with proven academic and professional credentials.

Career Management

(Para 14.10.22)

114. During the first 15 years or so of the career, every ISS officer should work in about four of the following areas: Applied Statistics (sampling design, time-series analysis and forecasting, statistical modelling and inference, classificatory techniques, etc.), Computer linked areas (Systems analysis and software development, survey data processing, data bank and data warehouse management, desk top publication, computer management, etc.), National Accounts, Agricultural Statistics, Industrial and Commercial Statistics, Population and Socio-economic Statistics, and Field Operations.
115. Gradually during the next 5 years or so, he or she should be required to narrow down the area of specialisation to only one or two of these areas. The role of the cadre management should be to help harmonise the choice of specialisation by the officer with the goals of the organisation. All transfers and training of an officer should be consistent with the goals of specialisation.
116. A computerised database of details of qualifications, job experience and training undergone by every officer must be maintained up-to-date.

Subordinate Staff

(Para 14.10.28)

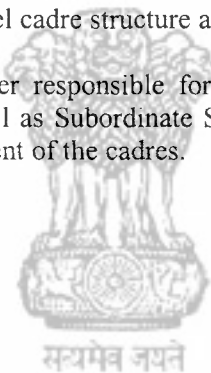
117. As the constitution of the Subordinate Statistical Service has been recommended by the Fifth Central Pay Commission and the related issues are under active

consideration of the Government, all relevant aspects as mentioned in the body of the report should be considered by the Government while constituting the service.

Indian Statistical Service

(Para 14.10.37)

118. As a one-time ameliorative measure, ISS officers should be given the benefit by awarding them the Senior Time Scale, Junior Administrative Grade and Non-Functional Selection Grade in the 5th, 9th and 14th year of their service. The Commission is aware that quite a few officers would miss this benefit because the length of their service is only marginally shorter than the specified limits set above. The Commission hopes that the next two recommendations, if implemented promptly and properly, would resolve the problem.
119. Ministry of Statistics and Programme Implementation should immediately carry out a Cadre Review of the Indian Statistical Service and thereafter every five years to assess the statistical needs of different ministries and departments as per the guidelines of the Department of Personnel and Training.
120. In addition, all *ad hoc* promotions should be regularised, and vacancies should be filled up immediately. A panel for promotions to fill up vacancies during the following year should be drawn up in advance in the current year itself.
121. The Indian Statistical Service cadre should be restructured to narrow down the base so as to achieve the model cadre structure as recommended by the Fifth Central Pay Commission.
122. The stature of the officer responsible for management of the Cadres of Indian Statistical Service as well as Subordinate Statistical Service should be sufficiently high for better management of the cadres.



MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION

RESOLUTION

New Delhi, the 19th January, 2000

No.M/13011/3/99-Admn.IV. – The Government of India has decided to establish a National Statistical Commission to critically examine the deficiencies of the present statistical system with a view to recommending measures for a systematic revamping of the system. The commission will consist of Dr.C.Rangarajan, Governor, Andhra Pradesh, as its part-time Chairman and the following as part-time members.

- (1) Shri V.R.Rao, ex-Director, Central Statistical Organisation and UN Advisor
- (2) Shri S.M.Vidwans, ex-Director (Economics and Statistics), Government of Maharashtra and UN expert
- (3) Prof. J.Roy, Professor Emeritus at Indian Statistical Institute
- (4) Dr. Prem Narain, Emeritus Scientist, IARI and ex-Director, Indian Agricultural Statistics Research Institute
- (5) Dr. Rakesh Mohan, Director-General, NCAER
- (6) Dr. V.R.Panchmukhi, Director-General, Research and Information System for the Non-Aligned and other Developing countries
- (7) Dr. Y.Venugopal Reddy, Deputy Governor, Reserve Bank of India
- (8) Dr. K.Srinivasan, Executive Director, Population Foundation of India and ex-Director of International Institute of Population Studies
- (9) Prof. S.Tendulkar, Delhi School of Economics and Vice-Chairman, National Advisor Board on Statistics
- (10) Dr. A.B.L.Srivastava, Chief Consultant, Educational Consultants India Ltd., and ex-Professor, NCERT
- (11) Dr. Fredie Ardeshir Mehta, Eminent private sector Economist and Director, M/s Tata Sons Ltd.

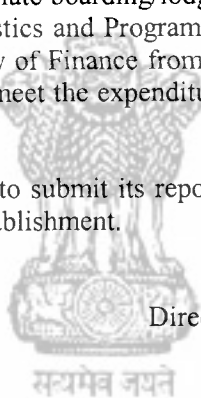
2 The terms of reference of the National Statistical Commission are as follows:

- (i) To examine critically the deficiencies of the present statistical system in terms of timeliness, reliability and adequacy.
- (ii) To recommend measures to correct the deficiencies and revamp the statistical system to generate timely and reliable statistics for the purpose of policy and planning in Government at different levels of administrative structure.

- (iii) To recommend permanent and effective coordinating mechanism for ensuring integrated development of the decentralised statistical system in the country.
- (iv) To review the existing legislation for the collection of statistical information and to recommend amendments, where necessary, to achieve the objective of collection and dissemination of timely, reliable and adequate statistics.
- (v) To review the existing organisation of the Ministry of Statistics and Programme Implementation (Statistics Wing) and other statistical units of the Government and to make recommendations on their staffing and training requirements to enable them to cope with the increase and development of statistical services.
- (vi) To examine the need for instituting statistical audit of the range of services provided by the Government and local bodies and make suitable recommendations thereof; and
- (vii) To recommend any other measures for improving the statistical system in the Country.

3 The commission will be assisted by a Secretariat headed by a full-time Secretary at the level of Additional Secretary. Appropriate boarding/lodging, TA/DA and transport arrangements will be made by the Ministry of Statistics and Programme Implementation and regulated as per the instructions issued by the Ministry of Finance from time to time. The Ministry of Statistics and Programme Implementation will meet the expenditure involved in all the activities from the budget allocations of the Ministry.

4 The Commission is expected to submit its report to the Government within a period of twelve months from the date of its establishment.



(N.S.Sastry)
Director General and Chief Executive Officer
National Sample Survey Organisation.

Annexe 1.2

National Statistical Commission Secretariat

Officers and Staff

1.	Dr. Vaskar Saha	Secretary
2.	Shri R.C.Sethi	Director
3.	Shri G.C. Manna	Director
4.	Dr. Ravendra Singh	Director
5.	Shri Pravin Srivastava *	Joint Director
6.	Shri T.Baskaran	Joint Director
7.	Smt. Rajnesh Jain	Joint Director
8.	Shri Kaushal Joshi	Deputy Director
9.	Shri J.S. Venkateswarlu	Deputy Director
10.	Shri R.A. Singh	Under Secretary
11.	Smt. Sosamma J.Abraham	Principal Private Secretary
12.	Shri K.B.Surwade	Assistant Director
13.	Shri R.Rajesh	Assistant Director
14.	Shri D.S. Sastry	Assistant Director
15.	Shri P.K.Singh *	Section Officer
16.	Shri Shiv Kumar *	Section Officer
17.	Smt. Aruna Upadhyay *	Private Secretary
18.	Shri Vijay Kumar	Senior Investigator
19.	Shri N.K.Sharma	Senior Investigator
20.	Smt. R.Shanthi	Senior Investigator
21.	Shri Ganga Charan	Senior Investigator
22.	Dr. Hem Raj Sharma	Senior Investigator
23.	Shri K.K.Chand *	Senior Investigator
24.	Shri Damodar Dass	Assistant
25.	Shri B.Ravi Chandran	Assistant
26.	Smt. Rachna Chhabra	Personal Assistant
27.	Smt. Elizabeth Varughese	Personal Assistant
28.	Shri K.V. Unni Krishnan	Lower Division Clerk
29.	Km. Meenakshi Bhardwaj	Stenographer (on contract)
30.	Km. Bhawana Pandey	Stenographer (on contract)

Other Officers Associated with the Secretariat

1.	Shri Ramesh Kolli	Director
2.	Shri T.V. Raman	Director
3.	Dr. G.M. Boopathy	Director

* Officials not completed full tenure.

Annexe 1.3

List of Members and Co-opted Members of Sub-groups

Sub-group: Agricultural Statistics

Members

Shri V.R.Rao Convenor
 Dr. Prem Narain, Member
 Shri S. M. Vidwans, Member
 Prof. J. Roy, Member

Co-opted Members

Dr. S.D.Sharma, Director, IASRI, New Delhi
 Shri D.K.Trehan, Economic and Statistical Advisor, DES, DAC, New Delhi
 Shri T.Koteswara Rao¹, Director, DES, Andhra Pradesh
 Dr. N.S.Sastry, Director General and Chief Executive Officer, NSSO, New Delhi

Sub-group: National Accounts Statistics

Members

Prof. S.D.Tendulkar Convenor
 Dr. Rakesh Mohan, Member
 Dr. Y. V. Reddy, Member

Co-opted Members

Mrs. Uma Dutta Roy Choudhary, Ex- Director CSO, New Delhi
 Dr. A. C. Kulshreshtha, Deputy Director General, NAD, CSO, New Delhi
 Dr. S. Bhide, Chief Economist, NCAER, New Delhi

Sub-group: Industry, Commerce and Corporate Sector Price Statistics

Members

Dr. V.R. Panchamukhi, Convenor
 Dr. Rakesh Mohan, Member
 Dr. F.A.Mehta, Member

Co-opted Members

Prof. B.B.Bhattacharya, Institute of Economic Growth, New Delhi
 Dr. Nagesh Kumar, Senior Fellow, RIS, New Delhi
 Shri. M.S.Maulik, Deputy Director General, CSO, New Delhi
 Shri R.L.Narasimhan Ex-Deputy Director General, CSO, New Delhi
 Dr. A.C.Kulshreshtha, Deputy Director General, NAD, CSO, New Delhi
 Dr. Shravan Nigam, Economic Adviser, M/o Industry, New Delhi
 Shri S.R.S.Gill, Director General, Labour Bureau, Chandigarh
 Shri Jogeshwar Dash, Director, DCA, New Delhi

¹ Director, Finance and Planning, A.P. Secretariat

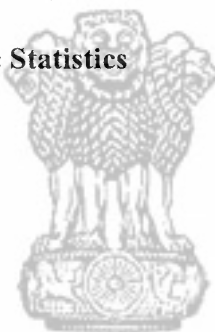
Members

Dr. F.A. Mehta , Convenor
Prof. S.D.Tendulkar, Member
Dr. Rakesh Mohan, Member

Prof. Ajit Karnik, University of Bombay, Mumbai
Dr. T.K.Bhounik, Senior Advisor (Planning), CII, New Delhi
Dr. J.K.Mukhopadhyay, Economic Advisor, Tata Services, Mumbai
Dr. N.S.Sastry, Director General and Chief Executive Officer, NSSO, New Delhi
Dr. S.Ray, Additionl Director General, CSO, New Delhi
Dr. A.C.Kulshreshtha, Deputy Director General,NAD,CSO, New Delhi
Dr. Subir Gokarn, Chief Economist, NCAER, New Delhi

Members

Dr. K.Srinivasan , Convenor
Prof. J. Roy, Member
Shri S.M.Vidwans, Member
Dr. A.B.L.Srivastava, Member



Co-opted Members

Dr. N.S. Sastry, DG and CEO, NSSO, New Delhi
Prof. Niklesh Bhattacharya, Retired Professor, Indian Stat. Institute, Kolkata
Dr. Shailendra Sharma, Adviser (LEM), Planning Commission
Shri R.L. Narsimhan, DDG (Retired), CSO, New Delhi
Dr. K.V. Rao, Chief Director, D/o Family Welfare, New Delhi
Shri K.S. Natarajan, Deputy Registrar General (Retired), Chennai
Shri S.K. Sinha, Deputy Registrar General, O/o RGI, New Delhi
Shri P.K. Ray, Director, DGEandT, New Delhi
Mrs S. Jeya Lakshmi, Director, CBHI, D/o Health, New Delhi
Dr. L.N. Balaji, Chief, Strategic Planning, UNICEF, New Delhi
Dr. Deepak Roy Choudhary, Asst. Registrar General, O/o RGI, New Delhi

Sub-group: Financial and External Sector Statistics

Members

Dr. Y. Venugopal Reddy, Convenor
Dr. V.R.Panchamukhi, Member
Prof. S.D.Tendulkar Member

Co-opted Members

Dr. N.S.Sastry, Director General and Chief Executive Officer, NSSO, New Delhi
Dr. A.C.Kulshreshtha, Deputy Director General, NAD, CSO, New Delhi

Sub-group: Statistical Systems, Information and Communication Technology Needs, Human Resource Development, Legislation And Audit

Members

Prof. J. Roy, Convenor
Shri V.R.Rao, Member
Shri S.M.Vidwans, Member
Dr. Y.Venugopal Reddy, Member
Prof. S.D.Tendulkar, Member

Co-opted Members

Shri M.G.Sardana, Ex-Director General, CSO, New Delhi
Dr. Pijush Dasgupta, Director, CMC, New Delhi
Shri P.H.Thakar, Director, DES, Gujarat
Dr. S.Ray, Additional Director General, CSO, New Delhi

Experts and Special Invitees

Dr.A.Prasad, Director, DEAP, RBI, Mumbai
Shri A.Saran, Director, DESACS, RBI, Mumbai
Dr.A.K.Ray, Director, DESACS, RBI, Mumbai
Shri A.K.Johri, Director, CSO, New Delhi
Dr. A.K.Srivastava, Joint Director, IASRI, New Delhi
Shri A.K.Srivastava, Joint Director, NSSO (FOD), Faridabd
Shri A.K.Vishandass, Additional Statistical Adviser, DES, DAC, New Delhi
Shri A.L.Joardar, Research Officer, DEAP, RBI, Mumbai
Shri A.S.Ahluwalia, Director, Labour Bureau, Chandigarh
Dr.Abhiman Das, Assistant Adviser, DESACS, RBI, Mumbai

Shri Aditya Narain, General Manager, DBS, RBI, Mumbai
Shri Aditya Prakash, Director, RandS Division, DCA, New Delhi
Prof.Ajay Adhikari, Indian Statistical Institute, Kolkata
Shri Ajay Prakash, Assistant Adviser, DEAP, RBI, Mumbai
Prof. Ajit Karnik, University of Mumbai, Mumbai
Shri Alok Kar, Director, NAD, CSO, New Delhi
Shri Amaresh Samantaraya, Research Officer, DEAP, RBI, Mumbai
Shri Anamitra Saha, Research Officer, DEAP, RBI, Mumbai
Shri Anand Prakash, Research Officer, DEAP, RBI, Mumbai
Shri Anil Kumar Sharma, Assistant Adviser, DESACS, RBI, Mumbai

Mrs. Anjali Anand, Director, Department of Posts, New Delhi
Shri Anjay Roy, Adviser, FICCI, New Delhi
Smt.Anupam Prakash, Research Officer, DEAP, RBI, Mumbai

Experts and Special Invitees – Contd.

Shri Ashok Sahoo, Assistant Adviser, DEAP, RBI, Mumbai
 Shri B.N. Anantha Swamy, Director, DEAP, RBI, Mumbai
 Shri B.N. Satpathy, Additional Economic Adviser, Ministry of Industry, New Delhi
 Shri Balram, Advisor, DES, DAC, New Delhi
 Dr. C. L. Agarwal, Director, DESACS, RBI, Mumbai
 Dr. C.B. Tripathi, Assistant Adviser, DEAP, RBI, Mumbai
 Dr. C.S. Prasad, Additional Development Commissioner, DCSSI, New Delhi
 Dr. Charan Singh, Director, RBI, Mumbai
 Shri D. S. Nagil, General Manager, DNBS, RBI, Mumbai
 Shri D.K. Mohanty, Director, RBI, Mumbai

Shri Daljeet Singh, Director, Labour Bureau, Chandigarh
 Shri Deepak Mohanty, Director, DEAP, RBI, Mumbai
 Shri Deepankar Mitra, Research Officer, DEAP, RBI, Mumbai
 Dr. G. Raveendran, Deputy Director General, NSSO (CPD), New Delhi
 Shri G.D. Sharma, Director, CSO, New Delhi
 Shri G. Mohan Rao, Joint Director, NSSO (FOD), Faridabad
 Shri G.P. Samanta, Assistant Adviser, DESACS, RBI, Mumbai
 Dr. G.S. Bhati, Adviser, DEAP, RBI, Mumbai
 Shri G.S. Ram, Labour and Employment Adviser, Ministry Of Labour, New Delhi
 Shri Gautam Chatterjee, Director, DESACS, RBI, Mumbai

Dr. H.A.C. Prasad, Economic Adviser, Department of Commerce, New Delhi
 Shri H.S. Neharia, Chief Statistical Officer, Excise and Customs, New Delhi
 Prof. H.V.L. Bathla, IASRI, New Delhi
 Shri Harish Chandra, Director, CSO, New Delhi
 Shri I.S. Negi, Joint Director, Labour Bureau, Chandigarh
 Shri I.S. Sohal, Director, RBI, Mumbai
 Shri J.K. Mukhopadhyay, Economic Adviser, Tata Services, Mumbai
 Dr. J.S. Parihar, Group Director, ARG, SAC, Ahmedabad
 Dr. Janak Raj, Director, DEAP, RBI, Mumbai
 Smt Jiju Kurien, Deputy Director, Department of Culture, New Delhi

Shri Johak Ray, Director, RBI, Mumbai
 Shri K. Damodaran, DGM, DBOD, RBI, Mumbai
 Shri K.A.D. Sinha, Adviser (Statistics), ISO, CWC, New Delhi
 Dr. K.C. Seal Ex-Director General, CSO, New Delhi
 Shri K.L. Datta, Joint Adviser, PPD, Planning Commission, New Delhi
 Shri K.L. Taneja, Director, ISMandH, New Delhi
 Dr. K.R. Satyamurthy, Adviser (Statistics), DAH, New Delhi
 Prof. K.S. Chalapati Rao, ISID, New Delhi
 Shri K.S. Natarajan, Ex- Joint Registrar General of India, New Delhi
 Shri K.S. Ramachandra Rao, Director, DESACS, RBI, Mumbai

Dr. K.V.B. Rao, Director, RBI, Hyderabad
 Shri L. Laxmanan, Assistant Adviser, DESACS, RBI, Mumbai
 Shri L.C. Mahajan, ICT Consultant, New Delhi
 Dr. L.N. Balaji, Chief Planner, UNICEF, New Delhi

Experts and Special Invitees – Contd.

Shri M. Neelakantan, Deputy Director General, NSSO (FOD), New Delhi
 Shri M.G.Sardana, Ex-Director General, CSO, New Delhi
 Shri M.K.Srivastava, Director, DAC, New Delhi.
 Shri M.M.Majhi, DGM, UBD, RBI, Mumbai
 Shri M.N. Limkar, Research Officer, DEAP, RBI, Mumbai
 Shri M.R. Nair, Officer-in-Charge, DEAP, RBI, Mumbai
 Shri M.V.S.Ranganadham, Director, DCSSI, New Delhi
 Shri Mohan Francis, Deputy Secretary, Department of Education, New Delhi
 Shri Muneesh Kapur, Assistant Adviser, DEAP, RBI, Mumbai
 Dr. N. Nagrajan, Adviser, DEAP, RBI, Mumbai

Dr.N.K.Unni Krishnan, Assistant Adviser, DESACS, RBI, Mumbai
 Dr.N.S.Sastry, Director General and Chief Executive Officer, NSSO, New Delhi
 Shri Narayanan Unni, Director (Statistics), DAH, New Delhi
 Shri O.P. Misra, Director (Statistics), MID, MWR, New Delhi
 Dr.P.D.Joshi, Director, PEO, Planning Commission, New Delhi
 Shri P.K.Saha, Chief Director, Department of Family Welfare, New Delhi
 Shri P.S.Tamgadge, AGM, DBS, RBI, Mumbai
 Smt Padmaja Mehta, Director (LEM), Planning Commission, New Delhi
 Shri Pardeep Maria, Director, DESACS, RBI, Mumbai
 Dr. Pranab Sen, Adviser, PPD, Planning Commission, New Delhi

Shri Pratap Singh, Assistant Director General (Statistics), ICFRE, Dehradun
 Shri Prithwis Jana, Assistant Adviser, DESACS, RBI, Mumbai
 Mrs.R. Ananthakrishnan, Principal Adviser, DESACS, RBI, Mumbai
 Shri R.Golait, Research Officer, DEAP, RBI, Mumbai
 Smt.R.Rajpathak, Research Officer, DESACS, RBI, Mumbai
 Smt.R.Sandhu, Joint Secretary, M/o Social Justice and Empowerment, New Delhi
 Dr.R.B.Barman, Executive Director, RBI, Mumbai
 Shri R.D.Bangar, Assistant Adviser, DEAP, RBI, Mumbai
 Shri R.D.Misra, Director General, DGFT, New Delhi
 Shri R.J.Verma, Joint Marketing Adviser, DMI, Nagpur

Prof. R.L.Karandikar, Indian Statistical Institute, Delhi
 Dr.R.N. Pandey, Director, CSO, New Delhi
 Dr.R.Nagraj, Associate Professor, IGIDR, Mumbai
 Dr.R.R.Navalgund, Deputy Director, RESA, SAC, Ahmedabad
 Shri Rajan Goyal, Assistant Adviser, DEAP, RBI, Mumbai
 Shri Rajan Kumar, Director, Labour Bureau, Chandigarh
 Shri Rajiv Loachan, Director, CSO, New Delhi
 Dr.Rajiv Mehta, Additional Statistical Adviser, NCFC, DAC, New Delhi
 Shri Rakesh Bhatia, Commissioner, DSI, Customs and Excise, New Delhi
 Dr. Ramanatha Iyer, Ex-Director, NSSO (FOD), Madurai

Dr. Randhir Singh, Principal Scientist, IASRI, New Delhi
 Shri S. Chakraborty, Joint Director, M/o Water Resources, New Delhi
 Shri S. Gayen, Assistant Adviser, DESACS, RBI, Mumbai
 Dr.S. Ray, Additional Director General, CSO, New Delhi

Experts and Special Invitees – Contd.

Shri S.K. Das, Director (Statistics), CWC, New Delhi
 Shri S.K. Ghorai, Adviser, DES, DAC, New Delhi
 Shri S.K. Pradhan, Assistant Adviser, DESACS, RBI, Mumbai
 Shri S.K. Das, Director (Statistics), Department of Family Welfare, New Delhi
 Shri S.K. Saha, Assistant Adviser, DESACS, RBI, Mumbai
 Shri S.M. Pillai, Director, DEAP, RBI, Mumbai
 Shri S.N.S. Tyagi, Assistant Adviser, DESACS, RBI, Mumbai
 Shri S. Ramanatha Iyer, Ex-Director, NSSO (FOD), New Delhi
 Shri S.S. Negi, Joint Director, DCA, New Delhi
 Shri Samarjeet Das, Research Officer, DESACS, RBI, Mumbai

Shri Satyananda Sahoo, Research Officer, DEAP, RBI, Mumbai
 Dr. Savita Sharma, Director, Planning Commission, New Delhi
 Smt. Seema Sagar, Assistant Adviser, DESACS, RBI, Mumbai
 Shri Siddhartha Sanyal, Research Officer, DEAP, RBI, Mumbai
 Shri Subash Chandra, Department of Education, New Delhi
 Smt. Subhra Battacharjee, Research Officer, DEAP, RBI, Mumbai
 Shri Sunil Kumar, Research Officer, DEAP, RBI, Mumbai
 Shri T. Gopinath, Assistant Adviser, DEAP, RBI, Mumbai
 Shri T.S. Sohail, Director, DEAP, RBI, Mumbai
 Dr. Tarlok Singh, Director, DEAP, RBI, Mumbai

Shri V. Parmeswaran, Director, Ministry of Labour, New Delhi
 Shri V.C. Augustine, Assistant Adviser, DESACS, RBI, Mumbai
 Shri V.K. Malhotra, Director (Statistics), CWC, New Delhi
 Shri V.K. Bhatia, Joint Adviser, PEO, Planning Commission, New Delhi
 Dr. V.K. Dadhwal, Head, CMD, ARG, SAC, Ahmedabad
 Shri V.N. Pandey, Joint Director, FSI, Dehradun
 Dr. Vijay Kumar Kaul, University of Delhi, Delhi
 Shri Vineet Kumar Srivastava, Research Officer, DEAP, RBI, Mumbai
 Shri Vishnu Kumar, Deputy Director General, Computer Centre, New Delhi
 Smt. Y.U.K. Sarma, Director, DESACS, RBI, Mumbai

Annexe 1.4

Composition of Committees, Groups and Studies Constituted by the National Statistical Commission

A. Committees and Groups Constituted

I. Committee on Informal Financial Sector Statistics

- | | |
|---|-------------------------|
| 1. Prof. P. Venkataramaiah, Pune | Chairman |
| 2. Dr. S.L. Shetty, Director, EPW Research Foundation, Mumbai | |
| 3. Dr.(Mrs.) N.N. Malliswari, Lecturer, St. Francis College, Hyderabad | |
| 4. Dr. M.V. Narayana Reddy, Andhra Bank, Hyderabad | |
| 5. Dr. Kailas Sarap, Professor of Economics, Sambalpur University, Orissa | |
| 6. Shri K.G.K. Subba Rao, Former Adviser, DESACS, RBI | |
| 7. Prof. Samar K. Datta, Indian Institute of Management, Ahmedabad | |
| 8. Dr. A.C. Kulshreshtha, Dy. Director Gen., CSO, New Delhi | |
| 9. Dr. A.K. Bandopadhyaya, CGM, NABARD, Mumbai | |
| 10. Shri R.P. Pathak, Adviser, RBI, Mumbai | Member Secretary |

II. Committee on Insurance Statistics

- | | |
|--|-----------------|
| 1. Shri H. Ansari, Member, IRDA, New Delhi | Chairman |
| 2. Dr. H. Sadhak, Secretary (Corporate Planning), LIC, Mumbai | |
| 3. Shri V.C. Joshi, General Manager, GIC, Mumbai | |
| 4. Dr. A.C. Kulshreshtha, Dy. Dir. General (NAD), CSO, New Delhi | |
| 5. Shri R.P. Pathak, Adviser, RBI, Mumbai | |
| 6. Shri G. Bhujbal, Director, Insurance Division, M/o Finance, New Delhi | |
| 7. Dr. Ravendra Singh, Director, NSC, New Delhi | |

III. Committee on Fiscal Statistics

1. Dr. Tarun Das, Economic Adviser, D/o Economic Affairs, M/o Finance, New Delhi
2. Shri Rakesh Bhatia, Director, CBEC, M/o Finance, New Delhi.
3. Shri A.N. Prasad, Joint Secretary, CBDT, M/o Finance, New Delhi
4. Shri P.P.S. Brar, Jt. Controller General of Accounts, M/o Finance, New Delhi
5. Shri P.M. Rangasami, Additional Adviser (FR), Planning Commission, New Delhi
6. Shri Ramesh Midha, Director, CBDT, M/o Finance, New Delhi
7. Dr. A.C. Kulshreshtha, DDG (NAD), CSO, M/o Statistics and PI, New Delhi
8. Shri S.M. Pillai, Director, DEAP, RBI, New Delhi
9. Dr. M. Govinda Rao, Director, Institute for Social Economic Change, Bangalore
10. Dr. B.B. Bhattacharya, Professor, Institute of Economic Growth, New Delhi
11. Dr. D.K. Srivastava, Senior Fellow, NIPFP, New Delhi
12. Dr. Atul Sood, Senior Economist, NCAER, New Delhi
13. Dr. Ravendra Singh, Director, National Statistical Commission, New Delhi

IV. Committee on Information Needs of Electronic Commerce

- | | |
|---|-----------------|
| 1. Shri V.K. Duggal, Addl. Secretary, M/o Commerce and Industry,
New Delhi | Chairman |
| 2. Dr. Tarun Das, Economic Adviser, D/o Economic Affairs, New Delhi | |
| 3. Shri Gulshan Rai, Senior Director, M/o Information Technology, New Delhi | |
| 4. Dr. A.C. Kulshreshtha, DDG (NAD), CSO, M/o Statistics and P.I., New Delhi | |
| 5. Shri N.L. Meena, Jt. Secretary and Legal Adviser, M/o Law and Justice, New Delhi | |
| 6. Dr R.B. Barman, Executive Director, Reserve Bank of India, Mumbai | |

7. Shri Pratip Kar, Executive Director, Securities and Exchange Board of India (SEBI), Mumbai
8. Shri Dewang Mehta, President, NASSCOM, New Delhi
9. Dr. H.A.C. Prasad, Economic Advisor, D/o Commerce, New Delhi
10. Shri Jaikant Singh, Jt DGFT, DGFT
11. Smt. Mita Roy Chowdhary, Jt Director, DGCiandS
12. Dr. Ravendra Singh, Director, National Statistical Commission
13. Mr.T.A.Khan, Senior Technical Director, NIC, D/o Commerce **Member Secretary**

V. Joint Committee on International Trade in Services

1. Dr.H.A.C.Prasad, Economic Adviser, D/o Commerce, New Delhi **Chairman**
2. Shri Dewang Mehta, President, NSSCOM, New Delhi
3. Shri G.A. Tada, Deputy General Manager, IDBI, Mumbai
4. Shri S.K. Mohanty, RIS, New Delhi
5. Shri R. Gopinath, Acting DG, Consultancy Development Centre, New Delhi
6. Shri Sudhir Mujli, President, Indian Ship Owners Association, Mumbai
7. Dr. Ravendra Singh, Director, National Statistical Commission, New Delhi
8. Shri S.N. Rao, General Manager, EXIM Bank, New Delhi
9. Shri Ranjit Lall, Director General, FIEO, New Delhi
10. Dr. A.C. Kulshreshtha, DDG (NAD), CSO, M/o Statistics and P.I., New Delhi
11. Shri M.R. Nair, Officer-in-Charge, DEAP, RBI, Mumbai
12. Shri Pradeep Madhavji, President, The Travel Agents Association of India, New Delhi
13. Shri R.K. Puri, Secretary General, Hotel Association of India, New Delhi

VI. Project on “Small Area Estimation of Socio-economic Variables”

1. Prof. Arijit Chaudhuri, Indian Statistical Institute, Kolkata **Project Leader**
2. Prof. T.J. Rao, Indian Statistical Institute, Kolkata
3. Prof. A.K. Adhikari, Indian Statistical Institute, Kolkata
4. Prof. Arun Kumar Adhikary, Indian Statistical Institute, Kolkata
5. Shri. Debi Prasad Mondal, Joint Director, SDRD, NSSO, Kolkata
6. Shri Shiladitya Chowdhury, Joint Director, DPD, NSSO, Kolkata

VII. Expert Group to Review the Improvement of Crop Statistics (ICS) Programme with Reference to its Survey Design

1. Prof. Arijit Chaudhuri, ISI, Kolkata **Chairman**
2. Dr. A.K. Srivastava, Jt. Director, IASRI, New Delhi
3. Shri M. Neelakantan, DDG, NSSO(FOD), New Delhi
4. Shri P.S. Bose, Director, NSSO (SDRD), Kolkata
5. Shri T. Baskaran, Jt. Director, NSC, New Delhi **Member Secretary**

B. Studies Conducted

I. Application of Small Area Estimation Techniques in Agriculture with Particular Reference to Crop Yield Estimates

Dr. A.K. Srivastava, Jt. Director, IASRI, New Delhi

II. Study on Rationalisation of Village Land Records

Dr. B.N. Tyagi, Director Agriculture (Retd.), Govt. of Uttar Pradesh, Luknow

III. Study to Examine Problems in Capturing the Growth of Industrial Sector through the Index Industrial Production (IIP) and the Annual Survey of Industries

Dr.R Nagaraj, Associate Professor, IGIDR, Mumbai

IV. Study to Identifying the Reason for Divergence Between the Estimates of Household Consumer Expenditure and Private Final Consumption Expenditure

Officers of Central Statistical Organisation and National Sample Survey Organisation,
Ministry of Statistics and Programme Implementation

V. Study of “ Different Sources of Data on Technical and Higher Education”

Society for Applied Research in Education and Development



Annexe 1.5

Government of India
(Bharat Sarkar)
Ministry of Statistics and Programme Implementation
(Sankhyiki aur Karyakram Karyanvayan Mantralaya)

New Delhi, dated the 23 January, 2001

RESOLUTION

No. M-13011/3/99/Adm.IV. The Government of India established a National Statistical Commission under the chairmanship of Dr.C.Rangarajan, Governor, Andhra Pradesh vide Gazette Notification dated 19th January, 2000. The Commission consists of part-time chairman Dr.C.Rangarajan, Governor, Andhra Pradesh and 11 part-time members.

- (1) V.R.Rao, ex-Director, Central Statistical Organisation and UN Advisor.
- (2) S.M.Vidwans, ex-Director (Economics and Statistics), Government of Maharashtra and UN expert.
- (3) Prof.J.Roy, Professor Emeritus at Indian Statistical Institute.
- (4) Dr.Prem Narain, Emeritus Scientist, IARI and ex-Director, Indian Agricultural Statistics Research Institute.
- (5) Dr.Rakesh Mohan, Director-General, NCAER.
- (6) Dr.V.R.Panchmukhi, Director-General, Research and Information System for the Non-aligned and other Developing countries.
- (7) Dr.Y.Venugopal Reddy, Deputy Governor, Reserve Bank of India
- (8) Dr.K.Srinivasan, Executive Director, Population Foundation of India and ex-Director of International Institute of Population Studies.
- (9) Prof.S.Tendulkar, Delhi School of Economics and Vice-Chairman, National Advisory Board on Statistics.
- (10) Dr.A.B.L.Srivastava, Chief Consultant, Educational Consultants India Ltd. and ex-Professor, NCERT.
- (11) Dr.Fredie Ardeshir Mehta, Eminent private sector economist and Director, M/s Tata Sons Ltd.

2. The terms of reference of the National Statistical Commission are as follows:

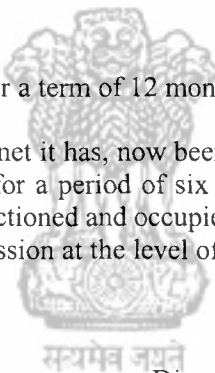
- (i) To examine critically the deficiencies of the present statistical system in terms of timeliness, reliability and adequacy.
- (ii) To recommend measures to correct the deficiencies and revamp the statistical system to generate timely and reliable statistics for the purpose of policy and planning in Government at different levels of administrative structure.

- (iii) To recommend permanent and effective coordinating mechanism for ensuring integrated development of the decentralized statistical system in the country.
- (iv) To review the existing legislation for the collection of statistical information and to recommend amendments, where necessary, to achieve the objective of collection and dissemination of timely, reliable and adequate statistics.
- (v) To review the existing organisation of the Ministry of Statistics and Programme Implementation (Statistics Wing) and other statistical units of the Government and to make recommendations on their staffing and training requirements to enable them to cope with the increase and development of statistical services.
- (vi) To examine the need for instituting statistical audit of the range of services provided by the Government and local bodies and make suitable recommendations thereof; and
- (vii) To recommend any other measures for improving the statistical system in the Country.

3. The commission is assisted by a Secretariat headed by a full time Secretary at the level of Additional Secretary.

4. The commission was set up for a term of 12 months from the date of notification.

With the approval of the Cabinet it has, now been decided to further extend the tenure of the National Statistical Commission for a period of six months from 19th January, 2001 to 18th July, 2001 along with all the posts sanctioned and occupied for its secretariat including the post of Secretary, National Statistical Commission at the level of Additional Secretary.



(N.S.Sastry)
Director General and Chief Executive Officer
National Sample Survey Organisation.